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A GUIDE FOR

TRAINING HEALTH PERSONNEL

for the

Early and periodic Screening, Diagnosis
and Treatment Program (EPSDT)
Under Medicaid

EPSOT 6.9

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FOREWORD

This guide for training health personnel for EPSDT is part of a series issued on various components of the Early and Periodic Screening, Diagnosis and Treatment Program under Medicaid (EPSDT). Also in the series are: guides for Screening, Dental Care, Provider Participation, Diagnosis and Treatment, and Developmental Assessment and Treatment. The following guides are available to interested people from the Medical Services Administration: A guide to screening prepared by the American Academy of Pediatrics; A guide to Dental Care prepared by the American Society of Dentistry for children and the American Academy of Pediadrics; a Guide for Professional Provider Participation prepared by the Committee on Health Care of the Poor of the American Medical Association.

This manual was written with several purposes in mind: To assist EPSDT administrators, supervisors, and others in the training of allied health personnel; to provide trainees with an explanation of the program and a description of the human and technical skills they will need; and to give everyone concerned with EPSDT an understanding of the new and expanding role of the Family Health Worker in these programs.

Each local program will view its recruitment and training needs somewhat differently, and we hope that this guide will be adaptive to those needs. It is not intended to be a narrow "how to" instruction book for screening procedures, although that purpose is not ignored. Rather we hope that this guide will help each community develop a trained core of Family Health Workers whose special skills and insights can provide a new dimension to health care for children. The training program is intended for Family Health Workers not only in clinics but could be used by private physicians involved in EPSDT for their staff.

I wish to acknowledge my special appreciation to the staff of Health Facilities Foundation, and the Project officers Phyllis Dichter and Meg Kellog, to other HEW personnel who have assisted in the preparation of this guide, Helen Martz, Ph.D., Elsie Tytla, M.D., Barney Sellers, and to the consultants whose generous efforts made this manual possible and whose names are listed in the Appendix.

M. Keith Weikel
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WORKBOOK I

I. INTRODUCTION. Elements of Training

As indicated in the Table of Contents, this Training Guide is designed around several aspects of Early Periodic Screening, Diagnosis and Treatment (EPSDT): Organization, Case Finding, Test Procedures, Case Management, and Evaluation, each of which is covered in a separate workbook. While these workbooks are written for all persons concerned with EPSDT, each one contains sections whose primary interest will be for the administrator or supervisor, and other sections whose primary interest will be for the new health worker or trainee. And throughout the Guide, there is the assumption that we need to understand not only how to perform various tasks, but also why those tasks are necessary, and what can be accomplished through this new and expanded approach to health care.

1. What is EPSDT?

There has been a growing recognition that comprehensive health care of children must become a national priority, and that some means must be found to reinforce existing efforts and achieve some of the objectives for which we have waited so long. A major step in that direction was



taken in 1967 with the amendments to the Social Security Act and again in 1972 with the enactment of Public Law 92-603, which requires states to develop plans for an EPSDT program or in other words for the identification and treatment of physical and mental defects of all children under age 21. These plans are being implemented somewhat differently in the different states, and will vary still further as different settings and staffing patterns come into use. But there are elements of service and standards of quality that must be included in every EPSDT program, and variations should be employed to increase consumer satisfaction, reinforce family health maintenance, and give children the best possible start in life.

Although there can be little quarrel with the objectives of EPSDT, communities will encounter many problems in carrying out the program, and at the outset may seem apathetic or even resistant. These problems must be understood by all persons working in the field of child care, and must be taken into full account in training persons involved in implementing EPSDT staff. The problems are not necessarily peculiar to EPSDT, but are rather the culmination of difficulties that have surrounded so many community-oriented programs. These difficulties are often caused by insensitive policies, inadequate planning, stereotypes and distortions about the poor and dependent, and the almost uni-V versal dissatisfaction with public welfare. The result has been the under-use of programs, social and economic waste, and frustration for the consumer and the health worker. But EPSDT is innovative, and may be able to turn some of these deficits around. For many of these difficulties can be overcome by proper orientation and training of staff. There is no magic formula, and some sense of mission as well as a commitment of energy and patience are necessary.

The EPSDT strategy must recognize that there are structural tensions built into most community programs, and that the whole notion of welfare dependency and powerlessness has brought into focus some of the

failures of the system. The EPSDT staff must therefore not only be trained to detect health problems early, but also to create a health system which is aware of feelings and relationships, builds a sense of trust, corrects errors in communication, and advances the self-worth of both the family and the health worker.

Each word in the phrase "Early Periodic Screening, Diagnosis and Treatment" is significant, and has meaning for our training design:

Significance

Early because we know that early intervention in a health problem is likely to produce a more successful outcome.

<u>Periodic</u> because health problems can, and do, occur all through life; and because too many children are still seem by a doctor only when there is a pressing problem.

Screening because for children in many localities, and particularly for the children of poor families, there is little opportunity for regular examinations by a physician; and because in nearly every community the physician must devote most of his Training Implication .
Outreach, casefinding, and health

education techniques must be

erphasized.

The notion of health maintenance requires that the EFSDT program be planned and developed with community input. This in turn requires that the staff be trained as a communications link, able to encourage and use ideas from the community about the way in which health care should be delivered.

Screening enables certain staff members (such as the physician) to delegate tasks to other health workers who must in turn become proficient in a variety of skills. time to treatment.

Diagnosis because in order to provide appropriate care, we need to know the clinical significance of the screening tests.

To be an effective "screener," the health worker must understand the purpose of the tests and the importance of certain data to the physician or other specialist in reaching a diagnosis.

<u>Treatment</u> because screening is useless without follow-up evaluation and care.

Much of the treatment process is dependent upon the family's understanding the problem and being willing and able to follow a treatment plan. The health worker is indispensable to effective and continuing care.

One can see that EPSDT, with its outreach, prevention, health maintenance, family and community orientations, requires a staff equipped to perform multiple services. New training strategies are necessary in order to bring together a variety of functions from the traditional roles of public health, social work, community organization and health education. Each staff member will bring to the program some measure of professional, technical, or social or human experience, and each staff member should assume responsibility for teaching and training others. In this way, new combinations of skills can be developed. This manual attempts to go further than simply providing a set of instructions; it assumes that each trainee will in due course become a trainer, probably specializing in certain skills, but at the same time aware of the problems of organization and supervision, quality and cost control, and performance evaluation.

The teaching context interweaves responsibilities for caregiving and education, so that children and families can learn more about their health and its maintenance. This education should assist families in



making intelligent choices about health care, and result in a kind of self-help and accountability. To a large measure, the success of the staff in teaching will reflect the success of the staff in learning.

2. The Role of the Paraprofessional

EPSDT training is much concerned with the allied health professional or paraprofessional. "Paraprofessional" is one of many labels attached to new roles that have emerged in health, education, social work, law enforcement, and other services. It is a shorthand word coined to describe persons who perform tasks requiring less "professional" technical skills, but skills which are equally important in a successful health care system. Aides or assistants are not new to the health field, but the term paraprofessional (or "health technician," "community health worker," "new careerist," etc.) better describes these

new functions which not only provide assistance to the professional, but also replace and augment many of the traditional professional tasks.

The paraprofessional role grew in part from the shortage of professionals, and in part from the realization that traditional manpower was inadequate not only in numbers, but also in the understanding and ability to meet rising expectations in the community. At first, paraprofessionals were drawn from among men and women who had attended college but lacked formal professional training. New training techniques and the incorporation of the career concept, led to the upgrading of workers already in the health field, while a later trend, supported by new legislation, recruited "indigenous" workers from among the groups to be served. Another source of paraprofessionals has been through the civilian training of former military health workers (medics or corpsmen).

There is hard evidence that the use of the paraprofessional has not only helped to reduce costs, but has often had a positive effect in changing the health delivery system. With respect to EPSDT, it has been demonstrated that paraprofessionals taking a child's medical and behavioral history, completing a physical observation form, and administering certain physical and developmental tests, can identify certain problems as effectively as traditional pediatric or psychological screening procedures. There is no doubt that paraprofessional training is ideally suited to EPSDT, and offers both trainer and trainee opportunities for career development and innovative practices in health care delivery.

3. The Training Program: Responsibilities of the Trainer

Some General Observations

There is a vast difference between knowledge for intellectual

stimulation—for something to think about—and knowledge for application to the problems of human services. The chief difference is that when we apply knowledge to the solution of human services problems, we have to see ourselves as helping persons. This in turn means that we have to recognize that what we learn and teach is filtered through a screen of self-concepts, belief systems, and individual interpretations shaped by our own experience in life.

For this reason, trainers in health care must spend a considerable amount of time helping trainees develop a groundwork of self-understanding. An initial goal is to enable the trainees to acquire enough self-awareness to retain objectivity even when dealing with client problems similar to their own. If trainees are unable to remain reasonably objective, there will be a tendency to confuse or blend their difficulties with those of the family being served, so that their helpfulness is limited—especially if their own problems have them stymied. One of the pitfalls in relying solely upon technical training without reference to the trainee as a person is that if the trainee's insights are not developed, he/she may superimpose his/her ideas on those of the family in a non-productive way.

The trainer must therefore begin by assisting the trainee in making the transition from the worker role to the helper role. This transition is particularly important when the trainee is selected from among the population to be served. Consciously or unconsciously, helpers who were very recently identified with the community may over-react in their attempt to achieve a new identity, by breaking off from former associates. This is often in response to fantasies about what the agency or clinic expects of trainee behavior. Sometimes this over-reaction takes the form of being harsh and punitive towards the client, or may on the other hand take the form of over-protection. Either one of these attitudes may emerge unless the trainees are helped to understand and compare their old and new role behaviors, and to examine

their feelings about those behaviors through "who am I?" types of questions.

Trainers can only go part way in advancing this sense of self-awareness, but they must not limit their efforts by seeing traing only as a classroom experience. They should see several devices or modes for training: classroom, field, supervision and preceptorship. Proficiency in skills is almost never learned through classrooms alone, but must also be taught under field conditions and in a supervised setting. Through this method, intellectual learning is reinforced, and role behavior can be examined and evaluated on the job. Classroom and field training can be successfully alternated so that discussions about role, for example, could begin in the classroom, find some working-out in the field, and be evaluated back in the classroom again.

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The effectiveness of this kind of co-ordinated training depends on the trainer and supervisor (if they are different persons) working in full partnership, from the planning stages to graduation. A preceptorship model may be useful because preceptors are more-or-less neutral members of the staff who hold no administrative power over the trainees, and may therefore be able to assist with problems that the trainees might otherwise be reluctant to share with supervisors.

Care must be taken, however, that preceptors do not dilute or unduly interfere in the supervisor-trainee relationship. And there is the further problem of confidentiality between the preceptor and trainee. The preceptor needs to have that confidence, but it must not be used to undermine administrative responsibility. The preceptorship will work if the training goals, as well as the functions of the preceptor and supervisor, are clearly defined and agreed upon from the start. (See later paragraph on "Faculty.")

Many of the activities in EPSDT require the health worker to have a

recognition of social, psychological and emotional factors, and to be capable of dealing with them in some measure. Thus case-finding, identifying Medicaid eligible families and bringing them into the program, and case-management, keeping patients in the program and assisting them to obtain needed care until treatment is completed or a problem solved, mean that the health worker must deal with fears, resistance and hostility; and further require a high level of rapport-mutual comfidence—between the health worker and the family.

Confidentiality is an important issue in care and training. Despite the long and successful use of paraprofessionals in counseling and in other very sensitive helping roles, anxious professionals may raise confidentiality as an excuse to bar the indigenous health worker or other paraprofessional from therapy functions, or limit them to menial tasks that deny them opportunity for career development.

Evidence has proven again and again that the responsibilities surrounding confidentiality can be acquired by apt students, whether they are professional or paraprofessional, whether in their own neighborhood or elsewhere. In practice, professionals have shared extremely sensitive case data with paraprofessional colleagues who have shown themselves fully appreciative of the ethical components involved.

Specific Training Objectives

The careful specification of training objectives is important, and it is a foremost responsibility of administrators, supervisors and trainers to decide:

- o What is wanted
- o What is needed to achieve it
- o How to measure the degree of achievement.

In more specific terms, training objectives would be:

- a. To develop a cadre of personnel with <u>technical competence</u> to carry out every aspect of EPSDT as required by law, and as further defined by program planners and managers.
- b. To train such a cadre in as many EPSDT skills as possible in order to provide staff interchangeability.
- c. To provide the staff with the knowledge, attitudes and <u>func-tional capabilities</u> that can serve as a springboard to a continuing and growing health career.
- d. To develop EPSDT skills in an organized manner so that <u>tasks</u> may be <u>standardized</u>. This is important if the EPSDT trainee is to have lateral (other programs) and geographic (other areas) mobility.
- e. To use the more proficient <u>trainees as teachers</u> themselves, making them "skill multipliers" and providing the program with a stable, economic staff resource.
- f. To design training so that entry-level workers can be <u>advanced</u> to trainer and supervisor responsibilities as <u>quickly</u> as possible.
- g. To provide comprehensive training through which all personnel—workers, trainers, supervisors—learn consultive skills which can become a career in itself, and which can draw together other community agencies and groups around EPSDT.
- h. To train staff so that besides having a thorough knowledge of technical procedures, they will also be well-grounded in the use of self, with the attitudes and capabilities that will make EPSDT an attractive and effectively utilized program.
- i. To find and apply the latest techniques, not only in training, but in the service areas themsleves, and develop a <u>program</u> <u>flexibility</u> that can substitute new techniques for old, and that will foster <u>staff flexibility</u> and a willingness to experiment and continually learn.

How to Design a Training Program

A successful training program will include:

- (1) Development of basic knowledge and skills upon which subsequent training can be built.
 - (2) Co-ordination of training so that each section is related to the other.
- (3) Logical sequence and continuity.

An important introduction to a training program is the orientation of the traines to the agency or clinic. Freferably this should be done by the program director or administrator with (a) each trainee, (b) each new member of the EPSDT staff, and (c) with the trainees and new workers as a group. It is often taken for granted that new workers and trainees will somehow learn about the agency just by sitting in an office or walking around and absorbing the atmosphere of the organization. Not only does this not happen, but instead personnel get the feeling that they are alone, relatively isolated, and that they must be able to handle their own uncertainties without being able to ask questions.

A solid, intensive orientation, including a tour of the agency/clinic, should be of the kind that generates questions and creates a sense of common purpose and togetherness. The trainee should at the start be made to feel that he or she is a real part of the organization. Questions must be answered carefully so that the trainee's self-respect is not diminished, but instead the trainee is made to feel important and worthwhile.

The subject matter for this orientation should go beyond explaining and describing the work of the agency/clinic and its rationale. Matters of administrative procedure, the timing and purpose of staff meetings, and even cost effectiveness, can and should be shared with new workers at the very outset. Trainees should also be encouraged

to participate in the development and modification of the training program. The only reason for delaying this participation is that the trainer may have to wait until trainees who are new to the health field have acquired enough information to make their participation meaningful.

Some very useful training techniques have emerged with new styles of administration. The rising expectations and political sophistication of "neighborhood" people have brought with them increased willingness to speak about their own needs and desires, and this has helped change some of the closed and rigid hierarchies we have seen in health programs. In this regard, the training program should include:

- o Tolerance of, and acceptance by, the training group leader of opinion and comment from any group member. The objective here is the trust that arises from the group's knowing that whatever is discussed will be treated as confidential.
- Complete freedom from reprisals or "sitting in judgment" (the leader's using group support on behalf of a threatened member).

Emphasis is placed on <u>mutual trust</u> as it arises from group interaction, because it is an important base from which individuals learn to be frank and open about their lifestyles and behaviors. This need for trust, openness, and a work environment without rigid controls or fears of retaliation, is a recurrent theme in this guide, as is the trainee's goal of <u>self-determination</u>. "Self-determined" people who have the capacity to find out what they like and what they want to become, are better able to satisfy their own needs and the program's needs.

Personal growth is central to health worker training, and self-awareness is the key to that growth. Without self-awareness and understanding, there can be no real understanding of the client population, and no real willingness to extend oneself on behalf of that population. The foregoing comments are not to be taken simply as hints or guides to training, but rather as components which must blend into the atmosphere of the EPSDT program and which are fundamental to the "culture" of the agency or facility. Again, this atmosphere or culture does not appear by magic, but by a planned series of operations involving the trainee at every step and decision point.

If some of this seems remote from everyday training demands, it should be emphasized that a successful, continuing and effective health program must carry with it a certain style and image, and that without these the program may become "just another welfare service"—at best identifying some immediate disease problems and at worst failing to recognize some larger problems and failing to provide any longer-range support for the child and family.

Formal training methods and routines of classroom instruction will probably not be too productive, especially with paraprofessional health workers. The classroom enforces physical inactivity, and can be frustrating and inhibiting to those not accustomed to this method of learning. Therefore the amount of lecturing and information—giving of this kind that is necessary should be done in a friendly and easy manner. Wherever possible, learning material that is related to the personal experience of the trainee should be used, and the trainee should come to understand and trust that when his or her answers are rejected, it is not necessarily a reflection upon his or her own intelligence or capacity.

Classroom instruction with written examinations (or some other form of questions and answers) is a valuable indicator of whether or not learning is taking place. But it is only one part of a much larger process which can include such techniques as field training, on-the-job training, seminars, tutorials, conferences and meetings of various kinds (somatimes with outside speakers), and in some cases also encounter groups and sensitivity training. Programmed instruction, another

technique, is pratty much an independent type of learning usually by workbook, which takes the trainee through a series of steps each of which is outlined in a simplified fashion, and each of which provides a self-check to see if the subject matter has been absorbed. (Workbook IV of this guide uses this technique in part.)

Whenever formal classroom instruction is employed, a one or two hour session should be the outside limit. Training will be most effective here if the class can shift from discussion to visual aids to role-playing, interspersed with opportunities to practice what has been learned. Some programs will find it useful to assign a trainee to a classroom for part of the day, and to an on-the-job situation with selected tasks for the rest of the day. This has the advantage of providing the stimulation which actual employment brings. Furthermore, it gives the supervisor a chance to see how the worker relates to the tasks, as well as to the children and families, and to judge how well the worker understands assignments and directions. For his or her part, the worker can bring the daily work experience back to class for review and discussion.

Written materials should be visually arranged so that they are readily understood. Language should be as direct and jargon-free as possible, and should conform to the scope of the trainee's knowledge. Of course every profession has its "in" language, and the new worker will soon become part of the "club." But if jargon or technical language is used with "outsiders"—and specifically in discussions between health workers and parents—the meaning should be explained. Simplification does not mean talking down to people, and it can be done as a courteous effort.

Supervisors and methods of supervision are of the utmost importance in training. The best results will be obtained if the trainee can have a continuing responsibility to a single supervisor during the course of training. Supervision is a reinforcement device that helps to sort out good practice from bad. The field supervisor should be a link and channel to the classroom. What is taught in the classroom, and what is expected or reinforced in the field, should be exactly the same or should be modified with the knowledge of everyone concerned. Different messages from classroom instructors and from supervisors will confuse and frustrate trainees, and undermine both the service and training programs. If the field supervisor and classroom trainer are different persons, the contents, method and objectives of the training and staff development program must be shared between them.

It is a basic principle that the trainee or worker should <u>not</u> be kept under <u>close</u> supervision any longer than necessary. Independent functioning should be encouraged because it reduces the cost of training and supervision, and because it makes for a more interested and responsible worker. How actually to determine when close supervision is no longer necessary is one of the difficulties in training. The decision should, however, be reached jointly between the worker and supervisor.

Faculty

It is important that the responsibility for co-ordinating and directing the training program be assumed by a single individual, although that person may draw upon others with special competencies in the different areas of training. Whether the co-ordinator is assigned to a particular EPSDT program, or is responsible for a centralized training program serving several agencies, he or she must be thoroughly familiar with the objectives, scope and policies of the EPSDT effort, and with the needs of the population to be served.

Faculty members may be recruited from the program <u>service staff</u> or from the outside. If they are from the service staff, the training

co-ordinator must resolve the sometimes competing demands of service and training, and it is very important that the client family not feel it is being "practised on" by trainees. If the faculty members are drawn from the outside, they will generally serve in what we have described as the preceptor role, in which case the training co-ordinator must familiarize them with the objectives of the EPSDT program, with the special educational needs of the trainee group, and if necessary with the social and economic characteristics of the neighborhood population.

The advantage of "in-house" faculty is, of course, its familiarity with the program and its proximity to the activity of the trainees. Outside faculty, on the other hand, may bring broader perspectives, and a more objective assessment of trainee accomplishment.

Medical content can be provided in the training courses by the program physician or by other physicians in the community. Other aspects of screening and treatment services can be taught by such specialists as dentists, and by nurses or other trained health workers. State or local health departments may be able to provide some of these preceptors or outside faculty. Nutritional training may be available from a hospital distician, home economics teacher, or home economist attached to an agricultural extension program. The training areas of interpersolal relationships, personal growth and development, the family and community, and the social and emotional effects of health care, are probably best taught by the social worker in the EPSDT program, or by one recruited as preceptor from a nearby agency.

Scope of Training

The normal course of training can be divided into a series of stages (or phases), each adding to the depth and range of trainee competence. They can be outlined as follows:

- a. A period of orientation.
- b. A period directed at establishing the <u>basic information and</u> <u>knowledge</u> common to the skills which will be required.
- c. On-the-job practice under close supervision.
- d. Feedback and refresher sections.
- e. Supplementary training for specialized techniques.
- f. Understanding the community and how it functions, and how various agencies and programs affect it.
- g. What is involved in <u>provision of services</u>, with emphasis on skills, and the knowledge and attitudes necessary to reach program objectives.
- h. Discussions about family and <u>family-centered</u> care, normal growth and development, characteristics of the population to be served, the relationship of lifestyle and personality to health factors and health maintenance, economic considerations, belief systems of the population, its response to stress and methods of alleviating stress.

There are some other rules of thumb which may serve to guide trainers and supervisors, and which might be listed as program needs:

- The need to establish the <u>role and function</u> of the trainee.
 No effective training program can be established without some clear idea of the tasks involved.
- o The need for continuity and on-going experience. One-shot exposure to a task makes an unfair demand that the trainee will successfully replicate what he or she has been taught.
- o The need for a training sequence, with progressively more complex learning and experience.
- o The need for administrative and educational planning around

training, preferably with trainee participation in developing the agenda. Planned materials can be made available in advance, allow readings to be assigned, enable trainers to prepare adequately, and keep a sense of accountability on all sides.

- o The need to <u>organize learning experiences</u> and provide maximum <u>stimulation</u> for the learner. Included here might be such techniques and materials as:
 - Assignment of trainees for a short period of time to a nursery school, center for retarded children, or rehabilitation center.
 - A seminar on family relations with live demonstrations of family counseling.
 - Films, video tapes and other audio-visual media.

4. Staffing Patterns and Recruitment

Health Screening has generated a variety of programs, and there has been an accompanying variety of staffing patterns and job functions. Some standardization of roles has begun, but we are far from having produced the last word about who, at what level, should be performing which functions in the outreach/testing/follow-up spectrum.

This lack of precise definition may be all to the good as we encourage EPSDT's potential for change in the uses of health manpower. EPSDT emphasizes the need for constant health improvement of a population with higher levels of disability and chronic illness than the general public. Ideally, the clients from that population should participate in the staffing design. This may not be possible right at the outset, but attention to personnel and consumer feed-back as the program develops—a policy of staffing "from the bottom up"—will increase the likelihood of a successful program, attuned to the needs of the

community.

It is generally agreed that the doctor and the nurse are basic to EPSDT staffing in much the same way as in neighborhood or health department clinics. However, in the screening component of EPSDT the doctor's role may be limited to supervision and training, with most of the service tasks delegated to nurses and paraprofessionals. The well-selected and trained paraprofessional should become a virtual standard for EPSDT staffing.

In daveloping criteria for the recruitment and selection of staff, we need first to take into consideration the structure, content and goals of the particular EPSDT program. Despite the lack of standardization, the administrator and trainer can define the knowledge and skills nacessary to perform the program tasks. These definitions in turn help us design the kinds of questions we want to ask job applicants.

In many cases, job applicants will have been pre-selected or interviewed by a referring agency such as an employment service, welfare department or community organization. These manpower sources should be advised of the number of EPSDT trainees to be employed, and the criteria that will be used in their selection.

Recruitment and selection criteria will generally include:

- a. Reason for seeking employment
- b. Size of family
- c. Sex
- d. Work experience
- e. Health background
- f. Attitude, personality and ability to learn
- g. Neighborhood resident or part of target population
- h. Level of education
- Appearance
- 1. Realth status.

- a. In general, the best applicant is probably the one who is seriously seeking employment, and who might be interested in other jobs as well, provided they pay decent wages and have some career prospects. This is the usual reason for seeking employment, and in the long run it is the healthiest. The applicant who comes in with the attitude: "I need a job; I would like a good job; I think I could do this one and I would like to try," will make a very good worker.
- b. Persons with large families and small children cannot be expected to be comfortable with the responsibilities required in the EPSDT program unless some arrangements can be made for child care. Indeed, wherever paraprofessional training programs exist, provisions should be made for child care so that we do not, in effect, discriminate against parents with large families. And in EPSDT in particular, we do not want to risk losing persons who may be very gifted in the handling of young children.
 - c. With respect to <u>sex</u>, the health aide function has largely been associated with woman. This is a stereotype that need not, and should not, be prolonged. Male health workers have already assumed many urgently needed roles in high crime neighborhoods or inner city tenements where it has been impossible to deploy female personnel. But there are in fact many other reasons for employing men (such as the impression of the program given to male teen-agers, and the identification of health maintenance requirements with male as well as female "authority").
 - d. Vagueness as to <u>work experience</u> should not be seen as a lack of reliability. Many persons who are educationally or culturally handkcapped have been relegated to work situations that are fragmented and sporadic. There should be no bias because of the absence of work history, nor should there be an assumption that those who have never worked will lack "good work habits." Evidence from "new careers" programs

contradicts the stereotype that people unaccustomed to routine employment are likely to have high absentee rates. Good training, and appropriate supervision directed at the work objectives, will produce employees with the same attitudes as others in the general work force.

- e. For the most part, administrators will want to give some preference to individuals with a <u>health background</u> or who are health career-minded. The application and interview may reveal latent skills, or areas of interest and understanding, which are basic to preventive health services and health maintenance.
- f. Primary emphasis in the selection of trainees should be given to attitude, personality, and the ability to learn. It is difficult to draw precise, objective conclusions about this unless an interview can be arranged in which the applicant is helped to describe himself, his attitudes, interests, preferences and dislikes. Both interviewer and applicant should have the opportunity to discuss the job and what is essential to it, and try and avoid superficial expression of interest. And the interviewer should try to bring out indications of bias and inflexibility which could become obstacles to the helping role. For example, the applicant who expresses overly strong religious beliefs, dislike for certain cultural or age groups, or intolerance in working with members of the opposite sex, should probably be turned away. Attitude has no particular correlation with education, culture, sex, age or previous work experience. The interviewer must also remember that what we are looking for here is not necessarily a verbalized attitude of compassion for the sick or poor, or a desire to be "useful," but rather a potential for the helping role that can be developed in the training process. Again, this is not an easy determination to make. A self-respecting desire to earn a fair day's pay under circumstances which promote self-respect and therefore respect for others, is probably as good a basis as any for making a selection. What works best in a community health program is the capacity for tolerance and

understanding the needs of others; interest in learning new skills and acquiring new relationships in the process of earning a living; and as important as anything else, that undefinable quality of "warmth."

- g. Selection should not be planned to provide employment for any special group. However, the advantages in recruiting personnel from the target population are well documented. Many members of this population will be welfare recipients who, together with the community at large, have a valid interest in substituting a useful employment pattern for dependency. The welfare recipient can readily identify with EPSDT, and many of the tasks involved in carrying out the community aspects of the program (such as linking and advocacy) are familiar to neighborhood residents.
- h. Much has been studied, written and proposed regarding educational requirements for entry level employment in the health field, and for workers in health screening. In some health occupations a high school education may be desirable, but where this requirement is seriously considered, the result is a high social cost to the community. EPSDT in particular would stand to lose many intelligent and promising individuals. High school diplomas have often been confused with the ability to read and write, which may be an absolute necessity in some types of health employment. But where candidates are otherwise qualified, the training co-ordinator should consider using the various methods for rapid learning of reading and writing fundamentals.
- i. <u>Appearance</u> is one of the most commonly applied standards for appraising job applicants. It is generally assumed that if job-seekers are really interested, they will "put their best foot forward." But in this period of individual life and clothing styles, especially among the young, the interviewer should not let an appearance stereotype bar employment of an otherwise promising individual.

j. It is essential that the health status of the applicant be discussed during the interview. Most programs require a health examination, so that unless there are obvious reasons which are apparent during the interview, a general impression of good health and vitality is sufficient. Care should be taken not to exclude handicapped individuals, particularly where the program has back-up staff to perform those functions not open to the handicapped person. Needless to say, the health industry has the same obligation as any other field, if not a greater one, to open its opportunity structure wider to the handicapped.

In summary, it should be noted that the characteristics sought of the job applicant, and the criteria for selection, are not really very different from those in other fields.

For the paraprofessionals, if they are racruited and selected with care, provided with normal employment safeguards, given reasonable opportunity to learn and understand what is expected of them, and are given adequate supervision, they will be able to work productively and creatively within the full range of EPSDT services. Key questions in the recruitment interview should center around the reasons for an interest in health programs or in health careers, and the origins and scope of that interest. The climate of the interview should be one of free association, and applicants should be encouraged to voice their own perceptions of the program, and its career significance for them. In any case, the nature of the work should be explained in simple terms (to the referring agencies as well as the applicant), and the nature and plan of training should be outlined. Still more important, the prospects for employment and the conditions of employment should be clearly described.

Recruitment policies may favor the older worker or the veteran. The older worker may bring unparalleled capability in working with young

people who are understandably anxious about health examinations. Older screening technicians have demonstrated that they learn the technology easily; and most EPSDT tasks do not require strenuous physical exercise. EPSDT also presents an excellent opportunity for the men and women with various medical skills who are released annually by the armed forces.

Where possible, it is probably well to assign one person the over-all responsibility for recruitment. Recruitment of paraprofessionals is deceptively simple: it is simple to the extent that it is always possible to find a large number of job applicants in the paraprofessional category; but it is complex because of the need to identify those characteristics which make someone especially suitable for providing health and human services.

Several kinds of community agencies may be expected to help establish a roster of EPSDT candidates for employment, including:

Departments of Social Services

Welfare Departments

Family Service Agencies

Public Employment Services

Clubs and Community Organizations

Church Groups

Special Poverty Programs

MEDIHC Programs (Military Experience Directed into Health Careers)

Veterans Administration

Family Planning Clinics

Rehabilitation Agencies for the Handicapped.

WORKBOOK II

II. GRGANIZATION: "Getting It Together"

An Administrator's Overview

The flexibility which is allowed, and even encouraged, under EPSDT legislation recognizes the varying conditions which face individual programs.

a. Legislation

Differences in the ways in which states implement Medicaid (Title XIX) have a direct effect on the scope of EFSDT services and on reimbursement rates. Some state laws have an impact on EFSDT. In California, for example, a new state law requires screening all children (not only Madicaid recipients) up to the age of six, and administrators in that state must design their programs accordingly. Other states are considering similar legislation. EFSDT is a developing aspect of national health care, and the administrator must be ready to respond and adapt to changes in both federal and state regulations. Longer range planning must also take national health insurance into account, since all of the proposals presently before Congress include provisions similar to EFSDT.

b. Scope of Services

There is a minimum of test procedures which must be included in the screening component of the program if a state is to be in compliance with federal regulations. Vision, hearing, immunization up-date, and a physical and growth assessment are obviously central to an effective program. Other tests are also necessary, the choice of some of them depending on geographic and ethnic factors: for example, screening for

lead poisoning in a central city area, or for sickle cell anemia among black children. In any given community the children may have special health needs which call for an emphasis on blood pressure, chest X-ray, electrocardioscan, drug dependency or alcoholism screening, or other special observations.

The treatment component of EPSDT depends on monies in the state plan for Title XIX; that is, a state can put limits on treatment available under its Medicaid program except in the areas of vision, hearing and dental services. These services must be provided to children whether or not the state provides them to all Medicaid eligibles. Availability of existing resources will also determine the design and scope of services. Some school districts will provide vision and hearing tests routinely. And many of the services associated with outreach, follow-up and counseling may be available through local agencies. The administrator or organizer of an EPSDT program can develop both formal and informal arrangements for this type of interagency support where it appears more cost-effective or where it will insure greater community participation.

c. Standards

Quality standards as they relate to test procedures, referral and follow-up, personnel qualifications and evaluation will also vary from area to area, but are being formulated through federal and state guidelines with input from health departments and professional associations such as the American Academy of Pediatrics. At present, administrators must be guided by state health department regulations, state medical practice acts, and the custom in their community.

d. Settings

The different settings for providing EPSDT services, some of their

advantages and disadvantages and the effect on staffing, are described further on, but the major difference is between programs engrafted upon existing comprehensive medical facilities capable of providing screening and treatment (a doctor's office, a neighborhood health center, a hospital outpatient department, or a health department) and free standing programs where the child is referred to a different location for diagnosis and treatment (mobile unit, store front screening clinic, school or day care center). Different regions will undoubtedly emphasize one model over another, perhaps reflecting the relative interest in EPSDT shown by health departments, hospitals, private practitioners or community organizations.

Staff functions are not so much affected by different settings, but there are significant differences in training and supervision. A hospital setting, for example, offers round-the-clock medical supervision and existing training programs which can be modified to include EPSDT staff. A mobile unit program, on the other hand, under the direction of a pediatric nurse practitioner, will only be visited periodically by a physician, and although the training program may be organized in conjunction with a nearby hospital or health department, it will likely require independent supervision under the screening administrator.

e. Costs

There are no major capital expenditures required for an EPSDT program. Large equipment does not go much beyond an audiometer, centrifuge and refrigerator. Free-standing programs using store-front, church, neighborhood center or similar spaces will generally find that building codes are not too restrictive, and mobile programs can lease standard office trailers (of the kind used at construction sites) and adapt them at relatively low cost. Where the EPSDT program is added to an existing medical facility, the cost of space will depend on how much of it is shared: for example, where a hospital outpatient area is used

for EFSDT twice a week, and for other clinics during the rest of the week.

The major cost consideration is labor. EPSDT offers an inherent economy in that it is designed to (1) make use of the least advanced professional or skill level for a particular task, and (2) take advantage of multiple skills (interchangeable roles). The quality and efficiency to be gained from this use of health manpower depends directly on the strength of the training program. Aside from quality considerations, inadequately or inappropriately trained paraprofessional staff will increase the number of higher-cost hours required of physicians and nurses.

Training costs should not only be budgeted for the new employee or as a start-up cost, but should also be included as part of the on-going operational program budget. Evaluation of training is a necessary budget tool and requires considerable sophistication on the part of the administrator. As emphasized throughout this manual, every EPSDT health worker has an important role with respect to communication with the family, health education, and program and patient advocacy. It is therefore not enough to determine that health worker A spends an average of 6 minutes on vision testing, while health worker B does it in 10. We need to know more about the health worker-family interaction that takes place during those 6 or 10 minutes. This subject is covered in more detail in the workbook on evaluation.

1. Rationale for EPSDT

Periodic health assessment of children has long been part of our health system. Whether in the office of the private physican or in the well-baby clinic of a health department, procedures for preventive care and health maintenance have become standard practice. Why, then, is there a need for EPSDT? For several reasons. First of all, not all

families have access to, or utilize, periodic preventive services. Outreach is therefore a major goal of EPSDT. Secondly, it would not be feasible to provide regular physicians' examinations to all children. A screening program enables us to identify those children who in fact need to be examined by a doctor (or other specialist), and this in turn enables the doctor to concentrate his skills on diagnosis and treatment. Third, this efficient use of health care resources is made possible in part by the adaptability of paraprofessional health workers: to the screening process, and their training is therefore another important goal of EPSDT.

2. Rationale for Screening

According to EPSDT guidelines, screening is the "use of quick, simple procedures carried out among large groups of people...to identify those in need of definitive study." This concept—sorting out apparently well children from those who show signs of abnormality or potential disease—is deceptively simple. Everyone appears to understand it. yet in an actual screening program the screening function usually turns out to have been either over-estimated or under-estimated, and staff members express a variety of concerns or disappointments. Staff involved with EPSDT directly and through the training process must take into account the continuing need to explain screening in general and their program in particular, to administrators of related agencies, to physicians and other professionals, to community leaders, and of course above all to the children and families being served.

Some of the more common concerns, and the answers to them, are:

The tests are not complete enough, Screening tests are not deand they miss a lot of things. signed to catch every problem. This is one reason they need to be done periodically. Even if the screening does not detect anything wrong, it gives the family a false sense of security because they think their child had a complete physical.

Screening tests often show an "abnormal" finding which turns out not to be significant.



Screening is an impersonal process.

This is why staff must always explain the difference between screening and a physician's diagnostic examination. And as part of the health education process, the family must be encouraged to seek medical care for certain symptoms as they appear, no matter what the results of the screening.

"Better safe than sorry" is too easy an answer for the parents who have gone through the trouble of a follow-up visit and who have worried until reassured by their doctor. Perhaps a better answer is to explain that screening is like a net, and we have to compromise between a large mesh and a small one. If we make the mesh too large, we will miss some children who should be referred to a physician: if we make it too small, we will send too many children to the doctor. and aggravate both the children and their families.

It need not be any more impersonal than a busy doctor's office or a hospital clinic. In fact, without the pressure of

sick children to care for,
screening staff can and should
be more personal.

There is no need to screen a child This is probably true if the
who was seen by a doctor the visit was for a general examonth before.

mination. However, if it was

This is probably true if the visit was for a general examination. However, if it was to set a broken arm, or for some other special purpose, it is unlikely that the range of screening tests were performed.

Screening is done by "aides" who don't really know enough about medical care.

"Aides" can be effectively trained as family health workers. This concern is at the heart of this training manual. The emphasis on a health program as opposed to a sick-care program, and the demonstrated technical and human skills of the paraprofessional is the best answer.

Screening without follow-up is useless.

This is correct, and the reason why diagnosis and treatment, and the concepts of prevention and health maintenance are integral to EPSDT.



Clearly, the most effective answer to these concerns will be in the operation of each screening FPSDT program. Negative attitudes towards screening may be a carry-over from programs with cumbersome and time-consuming screening techniques. New types of instrumentation, and more importantly, good staff training and utilization, can reduce screening time significantly, make the process comfortable and interesting, and attract families to the program.

Family members can acquire a good deal of knowledge about the tests, about the test findings and about the body, in a short period of time. This means that there must be a partnership atmosphere between family and health workers; and training for this partnership creates knowledgeable personnel who will be at a premium in the health industry labor force.

Explaining screening to the family and the community is basically the question of explaining the difference between health care and sick care or medical care. From the initial contact at outreach and the presentation to the family of the health questionnaire, the health worker needs to be trained to handle the guilt, anxiety and fears which often accompany our perceptions of illness, and which may discourage families from entering the screening program.

Some Organization Models

As indicated earlier, there are two general models for EPSDT, the one which is part of a comprehensive madical care facility, and the other which is a free-standing facility, limiting itself to the screening process. Each model includes a variety of settings:

Part of a medical care facility: Health Department Clinic
Hospital Outpatient Clinic
Neighborhood Community Health
Center (physician-staffed)

Physician's Office Private Group Practice Clinic

Free-standing screening facility: Store-front Clinic

Store-front Clinic
Neighborhood Community Clinic
(with or without physician
in attendance)
Community Center
School
Dey-care Center
Portable Programs (staff and
equipment set up periodically at any of the above
sites)
Mobile Unit

The basic distinction between these two models is that in the first we need to consider how EPSDT is best integrated into existing services, while in the second we need to develop affiliations for diagnosis, treatment and perhaps other services. Some of the advantages and disadvantages of these different sertings are:



a. EPSDT is directed at health care, not sick care, and should therefore be separated from a hospital or physician's office. The focus of EPSDT on prevention and health maintenance argues for separating the program from facilities for the sick and injured.

People will have more respect for screening if they see it being done in an accepted medical setting. EPSDT should not give the appearance of a program isolated from the mainstream of care. In most hospitals and clinics, the EPSDT program can be physically separated from sick-child services.

b. We do not guarantee continuity of care by simply having different services (such as screening and treatment) in one location. More than anything else, continuity of care requires a determined interest on the part of the health team not to "lose" the patient. This means serious attention to such things as patient education, problemoriented records, periodic monitoring (health maintenance) and co-ordination of services. If these are achieved, the location of the services is secondary.

The concept of continuity of care suggests that screening be joined with at least primary diagnosis and treatment (as the term EPSDT connotes). If EPSDT is freestanding, many children will have to be referred elsewhere for follow-up; many families will fail to keep the necessary appointments; and offices or agencies accepting referral may not always be cooperative or willing to enter into a referral network.

c. Accessibility is not so much a problem of single or multiple locations as it is a matter of scheduling convenient hours. If there is a parallel program of baby-sitting (or a kiddie corral) and transportation, the freeAccessibility of services is a genuine problem for families without cares or where public transportation is inadequate or costly, and this problem is aggravated by difficulties in scheduling visits into the parents' work schedule. standing EPSDT screening clinic can provide attractive access to a whole network of medical resources.

d. The effectiveness of screening programs must be measured in part by their ability to reach out and draw families into an on-going care system, rather than waiting until a major illness or injury occurs. A mobile unit is an excellent way to make outreach effective, and is perhaps the only effective way of reaching families in sparsely-populated areas.

e. Screening done by nurses or allied kealth professionals is not the same as a physician's examination. We employ screening to relieve the physician of tasks that can be performed by less-skilled persons. The physician's office should therefore be the place to which we refer children for evaluation, diagnosis or treatment. It should not be the place where screening is done.

f. Portable or stationary

A single, multi-service facility is therefore preferable.

Mobile units are generally too small and cramped to provide an attractive clinical setting, and they tend to give the impression of a temporary, passing service rather than of an important segment of health care. With a good outreach system, it is more effective to provide bus service which brings the family to the clinic, rather than trying to bring the clinic to the family.

A significant part of the EPSDT process is the physical assessment of the child. If this is done by a physician, there are additional insights (including some on-the-spot diagnosis) from which we can benefit, both in terms of quality of care and cost.

Health departments have long

programs set up in store-fronts, naighborhood centers, schools, churches, or other places where people normally congregate, have the advantage of being in close and familiar proximity to the population being served.

maintained well-baby clinics, and EPSDT is a natural extension of those services with which the community is already familiar.

g. To be successful, EPSDT needs an identity of its own; it will fail as an innovative program if absorbed into existing clinics or hospitals. An established medical care, association, whether doctor's office or hospital clinic, can avoid the problems and suspicions of "newness" that surround EPSDT.

These different settings also suggest differing emphases on the role of the health worker. For example:

- o In a free-standing clinic, the health worker must make every effort to assure that a child with a positive ("abnormal") finding, who has been referred to a specialist or treatment center, will in fact get there. Staff must therefore be familiar with back-up services in the community (transportation, baby-sitting, eligibility assistance) as well as with local hospitals and the physicians' and dentists' offices where the children will be referred.
 - o In a medical care facility where the EPSDT program is included,
 less emphasis may be necessary on follow-up co-ordination, since
 many or most of the families will use "in-house" services—i.e.,
 will be referred to services within the facility. Instead, emphasis might be on personalizing the EPSDT program and distinguishing
 its special role in the total health care process.
 - o The free-standing program may require the health worker to assume

a greater variety of tasks; for example, doing both outreach and testing. In a hospital, on the other hand, the "social service" department may assume some measure of outreach, if only to enroll in EPSDT those families already using the hospital.

o If EPSDT provides a physician's office with its first significant experience with Medicaid patients, training emphasis might be on how to make families comfortable who up to then had only used public facilities.

There is still another setting, the child's home, which may be used in conjunction with any of the settings we have described. When an outreach worker visits a home and begins to explain the purposes of EFSDT, that home has become a setting for the health information and education process that is part of EFSDT. If the outreach worker uses the home visit as an opportunity to help the family complete the health history questionnaire, we have gone a step further in transferring an EFSDT function from a clinical setting to a child's home. And because the equipment required for EFSDT is minimal, the full screening process can in fact be done by a visiting health team. Public health nurses have long been involved in doing immunizations, taking urine and blood samples, and making certain physical assessments of children in the home. Eye charts, portable audiometers for hearing tests, and simple kits for developmental testing, can complete the screening procedures.

It is difficult to make a generalization about whether home screening is economical. It will depend largely on how close or far apart the homes are, and on how many services the team can perform during each visit. Following are some of the advantages and disadvantages of home screening:

Advantages

Children and family can be more relaxed and comfortable in their own home than in a clinical setting.

If the child is at ease, the tests may be easier to perform and more accurate.

There is likely to be less feeling of time pressure on the child as well as the health worker.

The health worker has more onportunity to personalize the tests, observe and become part of the child's natural environment. (This can be particularly important in developmental testing.)

The home setting lends itself to having family members help with cer- health team is intruding on the tain of the tests-one of the best health education techniques. Furthermore, health education messages may make more of an impression in the home setting.

Disadvantages

The home environment may distract the child from tests requiring his attention or concentration.

The household location or family activities may produce noise which makes hearing or other tests difficult.

Crowded conditions may mean insufficient space for doing certain tests properly.

Friends or neighbors dropping in may be distracting, and may prevent confidentiality. The home environment may be distracting to the health workers, drawing away their attention and time from the testing process.

The family may feel that the privacy of their home. This will be particularly true if Medicaid families associate EPSDT staff with "welfare investigators."

The family is able to avoid transportation and baby-sitting problems.

Health education messages may not seem important outside a "clinical" setting.

The Screening Clinic

Depending upon its setting and upon some of the factors listed at the beginning of this workbook, the screening clinic will include different combinations of the following services which are basic to an EPSDT program:

Case Finding	Screening Procedures	Case Management	Counseling
Identification	Child/Family History	Intervention and	Prevention
Notification	Physical Assessment	Referral	Nutrition
Transportation	Laboratory collection	Follow-up .	Anticipatory
Baby-sitting	and testing		Guidance
and Child Care	Developmental testing		
	Dental Screening		
	Vision & Hearing		
	Immunization		
	Special Problems		
	Nutritional		
	Assessment		

A model flow chart and sample staffing pattern which follow give some idea of how a screening center might operate. It begins with an information campaign in the community which can be accomplished in many ways:

Newspaper, radio and television publicity
Posters and leaflets
Informational inserts with welfare checks
Speakers at neighborhood organization meetings.



In using any of the above methods, neighborhood residents themselves should be urged to participate: adults as members of panel discussions on radio or TV; school children to draw posters or help to distribute leaflets.

The more direct door-to-door outreach can be done by EPSDT staff members, by neighborhood residents (paid or volunteer), or by combined teams. In addition to information about the program, this home visiting permits enrollment or registration, and a copy of the health history (questionnaire) can be left with the parents, to be completed and brought along when they go to the screening clinic. Because of the confidential nature of the questionnaire, it is generally best that the neighborhood workers not assist the parents in completing it. (This of course does not apply to neighborhood residents who have gone through an EPSDT orientation and training program and have become family health workers.)

In a screening clinic which operates less than five days a week, much of the outreach should be done by the nurse and other health workers who, in addition to helping the parents complete the health history, may also complete one or two other screening procedures in the home. In larger, full-time screening clinics, outreach may be assigned to special health workers. But even then, the administrator should make every effort to rotate all staff members through the outreach function.

We have touched on the issue of confidentiality again because the health questionnaire is such a sensitive and significant entry point into an EPSDT program. We have spoken of the skill this requires on the part of the health worker. Some families will need considerable help in recollecting and bringing forth the family's health experience. Questionnaires tend to raise numerous fantasies that people have about their health, and no matter how familiar a person is with testing or check-up examinations, health screening can create worry and discomfort.

And as always, this is especially true where there is a literacy or language barrier. It needs to be emphasized again that as important as training persons to perform the screening tests, is the indoctrination of screening staff into some of the personal, cultural and social characteristics of the groups being served. The screening process offers health workers innumerable opportunities to express their acceptance of the family, and their desire to be supportive. Health workers must also take advantage, in outreach and during the screening, of the opportunities to describe the tests with frankness and honesty, and in understandable terms. This openness will attract similar behavior on the part of the family, and create an environment in which questions and answers may be freely exchanged.

A sample or model staffing pattern and some task assignments are:

Staff and Station

Duties

Director

General administrative and fiscal responsibilities

Secretary

Customary office tasks (may also share duties with Receptionism)

Health Services Co-ordinator

Responsible for direct services supervision of staff, and co-ordination of training

Station 1 Receptionist

- Intake procedures
- Billing
- Telephone follow-up for missed appointments
- Record-keeping
- -Completion of health history with family if not previously done

Station 2

Health Worker

Station 3 Health Worker

Station 4

Health Worker

Station 5

Health Worker

Station 6

Station 7

Nurse (Attendance of a physician at this station may depend on whether the nurse is a Pediatric Nurse Practitioner)

Station 8

Nurse or physician or health worker or any combination of them

Family returns to: Section 1

Receptionist

Driver

- Older children: height and weight vision tests

- Infants: height and weight, growth assessment, vital signs

- Audiometry

- Developmental testing

- Urine and blood tests

- Unclothed examination of child (physical, dental and growth assessment)

- Closing interview

 Assistance in making referral appointments; schedules next periodic screening

 Takes family home if necessary; responsible for maintenance and obtaining supplies for use in the EPSDT Program The number of health workers required for Stations 2 through 6 might actually be as few as two, depending mostly on the number of children being screened, but also on the particular test procedures adopted by the program. Thus, for example, some programs may want to assign a health worker full-time to audiometry; some programs may institute very sophisticated developmental testing procedures requiring a health worker with additional training in that area; some will want to focus health information and education at Station 8 during a review with the parents, while other programs may see this as a function best performed incidentally and informally at the other stations.

The order of flow through the stations need not be fixed. It should be flexible enough, for example, so that a family is not waiting in line at Station 2 while the health worker at Station 3 is unoccupied.

The Receptionist and Secretary may share certain functions, such as appointment-making or appointment follow-up, and billing. In some states, EPSDT billing forms will be simple adaptations of the existing Medicaid procedures; in others, a special procedure may be used. Non-Medicaid families are likely to be charged on a sliding scale basis.

Children with normal findings should be listed in a reminder file or similar record, so that they will be notified when they should return for a new screening. This periodic scheduling depends on the age of the child, and on the guidelines of the American Academy of Pediatrics or those established by the local program's medical staff or by state regulation.

Children with abnormal findings are referred to a specialist such as a pediatrician or ophthalmologist for further evaluation, and for diagnosis and treatment. Where the EPSDT staff notes problems affecting the environment of the child, the parents may be referred to agencies which can provide the necessary social or "protective" services.

Children referred for follow-up diagnosis or treatment are also listed in the reminder file for periodic screening. Charts should be colorcoded for referrals, with alphabetical cross-reference and a log of all referrals initiated.

If the Receptionist is unable to re-appoint a child with a missed appointment, the family should be visited, preferably by the same staff member who took the family history.

Finally, it should be noted that this staffing model has not provided for the tending of children while their siblings are being screened. This can generally be staffed by volunteers who, if properly oriented and trained, can use this opportunity to gain some general insights about the family.

EPSDT Services and Resources Chart

The accompanying chart is designed to help us visually understand the relationship of services centered around EPSDT. The chart serves several purposes. It can:

- o Help us analyze the service needs in the community
- Offer suggestions as to the types of services and resources that can meet those needs
- o Identify service links that should exist among providers
- o Point out where those links need to be strengthened or added.

The chart breaks down by types of services the resources that might be available in a community for referral, diagnosis and treatment. Not all of the resources listed may actually be found in your community. Or your screening program may not need to make arrangements to refer children to each of the resources listed. What is important is that a screening clinic make arrangements for referral with enough providers

EPSDT SERVICES AND RESOURCES CHART

BASIC DIAGNOSTIC AND TREATMENT SERVICES

Chart 1 Davelopment el

aboratory	General Medicine	Beering	Vision	Meart	Sar, some	Gynecology	Orthopedica	Dental	Mutrition		Dayelopment	
										Speach and Language	Hentel Heelth	Education and Counselis
rivata thoratorian compital shoratorian	Pediatrician	Out-patient or health dapartment hearing clinis	Ophthel- mologiet Optomatriet Out-patient or health dapartment eya clinic	General Fractitionar Cardiologiat Out-patiant or basich department hasst clinic Intermist	General Fractitionar ENT ape- cialist Out-partant spacch and hoaring climic	General Fractitionar OS/Gyn Out-patient Synacology clinic Health department synacology clinic Frantly pleening	Caserel Prectitions Orthopedice Clinic Health department ochinic Cifinic Crippled children's earvices Osteopeth	Private dentiet Group practice Dental achools Public health clinic	Cenaral Fractitional Mutritioniat WIC program School lunch programa		Community mestel beelth services Out-parism mestal mestal mestal health departments	Echoole Community searel searel centere

SUPPORTIVE SERVICES

PROTECTIVE SERVICES

Services for Family the handicapped Planning

Referral Walfers social Adult aducation Media agencies Day cars or Public welfare

Information

and

rvices

A ARTIGIA			SERER	BRETORNT	County	WHALLES		Madit addearson	undra affanctan	ony care or	FOULT WOLLD'S
**	asrvices	authority	employment spencies	Sociaty for Crippled	Family Planning Agancies	National Red Cross	sarvices dapartment	programa	Volunteer	children's centers	departments
	Yamily	Housing		Children and				Public and	groups		Family sarvices
	counseling	Inepactor	Spacis1	Adulto	Plenned	Local voluntary	Public Health	private			egencies
	agencies		employment		Paranthood	groups	social services	community			
		Health .	projects	United Corebrel	organisations		department	agencies			Community ments!
	Public	dapartment		Paley	_						health services
	Defaodars		On-tha-job					YHCA's and			
			treining	Head Start				TVCA*s			
	Beil bondsmen	Advocacy groups	programa	programs							
			Vocational	Nations1							
		programs	rehabilitation	Association							
	ralations			for Retarded							
			Training	Citisons			'				
	Advocacy groups		programs								
			Public .								
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so that children needing diagnosis and treatment can receive them.

(1) Basic diagnostic and This list can help us see where treatment services our program and services fit in with those of other providers.

(2) Protective services

These are the services which can improve the child's environment, and in turn his or her health.

(3) Supportive services

These services provide a means
rather than an end. They help
make it possible for families
to receive the other services.

4. Special Population Characteristics

We have mentioned briefly how the organization and scope of EPSDT services are affected by:

- Other health resources available in the community (such as a school vision testing program).
- o Geography. The special transportation requirements of a rural area, or the problem of exposure to agricultural chemicals. In the central cities, the problems of exposure to air or noise pollution, lead, rats, or the more generalized problem of crowding.
- Diseases such as sickle cell anemia which are dominant in a particular ethnic group.

But there are other population characteristics that need to be considered as EPSDT programs serve Mexican-American, Puerto Rican, Black, Asian, Bative American and other groups. For example, there is the problem of language barriers. This obviously calls for staffing with bi-lingual personnel wherever possible, and making certain that questionmaires, posters, signs and correspondence not be limited to English. Of equal importance, however, is that the staff be sensitive to the many cultural attitudes towards health, and understand that these attitudes are often rooted in a folk medicine which is sophisticated, and that can often be supportive of both the patient and of "modern" medicine. In most cases the EPSDT program will not be able to forge significant links with faith healers, herbalists, medicine men or other practitioners of folk medicine, but the program can accomodate itself to many of these folk values just as it does to the tenets of "established" religious faiths.

There is no question that a program serving a particular population group should draw staff from among that group; the advantages of the "Indigenous" health worker should be obvious, and are touched upon elsewhere in this guide. But it should be equally obvious that a health worker may speak the same language or have the same skin tone as the patient and yet be insensitive or unsympathetic to cultural attitudes. Being "indigenous" does not automatically insure the caring skills required for a successful health program. But with a training design that allows for an exchange of learning and experience between trainer and trainee (regardless of either's ethnic background), the result will be to produce a most effective family health worker.

There is another population to consider in cultural terms: the Medicaid client group that EPSDT presently serves, and that cuts across all ethnic backgrounds.

"Welfare" families, whose lives have been largely characterized by deprivation and dependency, may have life styles and social arrangements different from those of the EPSDT staff. Where this is the case, the staff must be helped to develop objective yet sympathetic insights into those differences.

Among the insights that need to become part of the EPSDT program staff is the reality that a fair number of welfare and Medicaid beneficiaries are in that position through no fault of their own. This is a very hard notion for almost-poor, hard-working employed persons to accept. It is equally unacceptable to certain health care providers, who tend to think of the medically indigent or dependent as "free-loaders." This is reinforced by shrill reporting about the "welfare mess," and we need to remind ourselves that program abuses are never the sole province of the beneficiary; they exist among provider groups as well.

Some Medicaid beneficiaries will associate EPSDT with negative or unsatisfactory experiences they have had with health agencies. EPSDT staff must understand an environment in which medical care has been chancy, with gaps and lacks in services, with sometimes hostile provider attitudes pointing to recipients who are unable to work as worthless or cheating, and with eligibility so antagonistically structured that the most motivated family may feel that the services gained are not worth the effort. Many welfare policies have tended to demoralize families. Intelligent outreach, clearly designed to find and correct the health problems of children, and offering services in a neutral but enlightened atmosphera, can give "welfare" a very different aspect. The search is for some kind of family assistance that will not stigmatize the individual, that sees health maintenance as an incentive to become independent, restore work capability and provide a sense of human dignity and worthiness.

The relationship between health practices on the one hand and illness (or morbidity) and life span (or mortality) on the other has long been established. So have the relationships between health and socio/economic/psychological conditions. Thus there are certain family health problems that merit special attention simply because they follow poverty. Crowding, insecurity, the need to "work the system," are just some of these problems which must be openly and thoroughly

discussed by EPSDT staff. Biases and feelings of hostility should be uncovered, and stereotypes explored—for example, that "sympathetic help coddles welfare patients and fosters dependency," or the "mink-in-the-closet welfare mother who parks her Cadillac around the corner while she trails into the welfare office with ill-clothed, hungry looking children, to lie her way onto the welfare rolls." Staff members of the Medicaid population can contribute knowledgeably to these discussions and help dissipate the stereotypes. Objectivity grows from good training, good supervision, and the clarification of feelings.

The Medicaid population is, of course, not made up entirely of welfare recipients. There are many employed persons who are able to meet all of life's necessities except medical care, and whose only welfare assistance is the payment of medical bills through Medicaid. These families may be close to, or even below, the poverty level, and the fact that they have taken the trouble to enroll in Medicaid should be an indication of a sensible attitude towards health maintenance.

We have titled the accompanying chart Population Characteristics and



POPULATION CHARACTERISTICS AND MEEDS CHART

Special Quelity and

Population	Considerations	status of services			Organization of p	rogram that accounts for	r differences	
			Transportation	Toota	Schedulins	Health education	Staff	Miscellaneo
aographic ietribution - urban - suburban - rurel	Transportation services evailabla Day cera sarvices evailable	lf inadequate	May need to provide it or make lisison with agencies which provide these services		May need epecial scheduling		May need to hire epecial driver May need special personnel	
	Special health problems: lead paint eir pollution veter and annitation reta Dangeroue accident ereas Recrestional fecilities	If present If present If present		May need to provide special test		May need to aducate perent to hazards of anvironment and to resources that sight be wallable to corract these hazards, or mathods of avoiding them	·	May need to make lisioon with special agencies that control thesa problems
Ethnic groups	Language and communication barriars Esting hebite Religious Barriars Health attitudes Genetic and endemic diseases			Bilinguel hashth history and forms Special questions and/or forms may not give objectionable teste		May mand to eansitize staff about differences and ecceptance of other people	Hay need bilingual personnel	
							١,	

Needs. It should help you:

- Review special conditions in your community that may affect the EPSDT program
- Determine the quality and status of services to meet those special conditions
- Decide what steps can be taken to improve conditions, or accomodate our services to them.

The chart outlines some of the possible special characteristics and how programs might accommodate to them. For example, if transportation is not easily available or is inadequate, the program will either have to provide this service itself, or else make appropriate arrangements with other groups or agencies. Special schedules for clinics may be needed and a driver might be hired. If there are different languages spoken in the community, the program may need bi-lingual personnel, bi-lingual health histories, and may need to sensitize the personnel to the cultural differences.

EPSDT, Medicaid, and the Doctor's Office

Whatever the previous experience of the private physician or of the family with Medicaid, the doctor's office may provide a mutually attractive setting for EPSDT.

For the doctor there is the challenge involved in seeing people when they are well, and keeping them that way as long as possible. There is the expanded opportunity to deal with the "whole" patient in his total family situation—a chance to apply a range of special, family-centered diagnostic skills. Adverse experience with public agencies may incline some families towards the private physician's office, but they must be convinced that they will find willing ears and a friendly environment in that office.

This in turn means that the physician may have to establish a new type of office regime, with staff that are community-connected or interested, and that are multi-skilled with the social and emotional insights about which we have spoken. Ideally, EPSDT outreach and public information efforts should promote access to both private and public settings, helping to do away with the welfare stereotype of the public clinic as well as of the private physician who does not want Medicaid patients "dirtying up his office." Joint training programs are also a possiblity, with private office and public clinic staffs each spending a little work-training time in the other's facility.

5. Exercises

- a. Complete a "Flow Chart" of your EPSDT program.
- b. (1) Fill in the attached "EFSDT Services and Resources Form" with the names, locations and hours available for the providers in your community to whom you refer patients.
 - (2) Where there are blanks, discuss with your trainer and fellow trainees why these blanks exist.
 - (3) Refer back to the chart on page to see whether there are other possible resources with which your program could make arrangements for referral.
- c. (1) Fill in the attached "Population Characteristics and Needs Chart" showing the changes and accommodations that have been made in your program because of the needs of the population you serve.
 - (2) Take another look at the chart to see whether there are additional changes you would recommend your program to make.

Exercise b (1)

EPSDT SERVICES AND RESOURCES BASIC DIAGNOSTIC AND TREATMENT SERVICES

Hours

Туре	Name of Provider	Location	Available
Laboratory			
General Medicine or pediatrics			
Hearing			
Vision			
Heart			
Ear, nose and throat			
Gynecology			
Orthopedics			
Dental			
Nutrition			
Speech and language			,
Mental health			
Education and			
counseling			

Exercise b (1)

EPSDT SERVICES AND RESOURCES PROTECTIVE AND SUPPORTIVE SERVICES

Туре	Name of provider	Location	Available
Welfare			
Legal Aid			
Housing			
Employment			
Services for the handicapped			
Family planning			
Transportation			
Information and referral			
Education			
Outreach			
Day care			
Counseling			

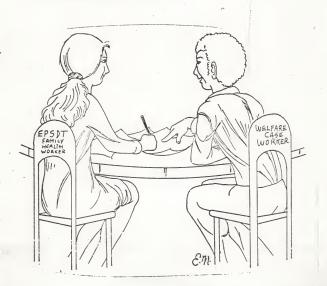
POPULATION CHARACTERISTICS AND NEEDS CHART

	Considerations status of	Transportation	Tests	Scheduling	Mealth education	Staff	Miscellapsou
raphic ribution urban auburban rural	Transportation services aveilable	31 SAMPLET SUM	16816	acardina.	MARKET SUBCRETOR	PLATE.	Miscellanson
rursi	Day care services available Special health problemes lead paint air pollution water and samitation rate						
	Dangarous accident areas Recrastional facilities						
thaic roupa	Language and communication barriare Esting babits Raligious barriare						
	Genatic and endesic diseases						-

WORKBOOK III

III. CASEFINDING -- OUTREACH

Casefinding is a term which was probably first used in the field of epidemiology where persons who might be sources or carriers of infection had to be located in order to control the spread of communicable disease. But where the term is used in this guide, casefinding is a method for identifying and notifying those persons who are eligible for or need certain types of health services, and encouraging and assisting them to receive those services. Casefinding is action help, and is sometimes called "outreach."



Shared Resources

Casefinding or outreach in EPSDT programs will not always be done by the community health worker or other staff members, because it adds to the expense of the program, and many states do not provide reimbursement for this activity. It is therefore not only advisable, but often necessary, to develop arrangements for outreach with appropriate social service agencies. For example, social service staffs of welfare departments may be responsible for outreach, and staff involved in the EPSDT program might assist the social service workers by orienting them to the goals and procedures of the program. This type of close partnership between EPSDT and welfare agency staffs extends also to case management, and will be touched upon again in the manual on that subject.

Importance of Casefinding

Casefinding is particularly important in EPSDT because the program is relatively new and needs to become known. It is urgent because the Medicaid population—the population most affected by EPSDT—has felt unwanted in the area of quality medical care; and in the process of casefinding, the outreach worker informs people about EPSDT and helps explain its importance as preventive care.

If we were to compare the number of people eligible for EPSDT with those who have actually participated in the program, the under-utilization would be apparent. One explanation for this—mentioned in the EPSDT guidelines—is the suspicion and fear which needs to be overcome "through the use of casefinding techniques and personal contacts." Other reasons for low participation include:

- o Not understanding what EPSDT is
- o Unclear information
- o Not clearly stated what the program will accomplish

- o Time and place are not clear
- o Not clear whether or not the services are free
- o Not clear as to who qualifies
- o Not very eye-catching: it is just "one more program"
- o Participants don't know "what will happen to them"
- o Not clear why a child should be "taken to a doctor" when he or she is not sick
- Most tax-supported programs are viewed by the poor with suspicion and distrust
- Up to now, most casefinding has been done by letter, with recipients viewing the check-stuffers (leaflets) as just one more piece of paper dreamed up by the bureaucracy
- o EPSDT mailings get lost among other similar papers
- o Services not easily available or accessible.

Goals

The EPSDT casefinding process offers the opportunity to achieve several goals: information dissemination and gathering, program promotion, education and self-help.

We have already mentioned information. Potential users of the program need to know about the services it offers and its important role in prevention and health maintenance. Naturally, you will find that there is much more you will want to tell people about the program; for example, that it is free of charge to those who are eligible, and where and when the services are being provided. Whatever methods you use, casefinding needs to be accompanied by an informational and promotional campaign that will alert the entire community to your efforts.

As you provide information, you will also have the opportunity to begin the process of health education. In addition to explaining the role of screening as a convenient and effective way of promoring good health, your program may require emphasis on a particular problem or a special service, such as fluoridation of teeth, sickle cell anemia, or immunization up-dating.

When you are able to do outreach on a direct, person-to-person basis, you will have the added advantage of "feedback"--being able to see and listen to the family's response, and being able to gather information. This information might be about the family itself and might be part of a questionnaire included in the outreach visit, or it might be more general information about the environment: the atmosphere of the neighborhood, the condition of the housing, possible dangers of lead poisoning, and so on.

This information-gathering will not only make you a more effective health worker and more understanding of the problems in the community, but will also help your program adapt and respond to the particular needs of the people you are serving.

We also mentioned the goal of self-help on the part of the participants. This is part of the whole health education process. Once a parent understands the importance of the various tests and learns to identify certain behaviors which may indicate the beginning of a problem for the child, the next step is for the parent to know what action to take, what preventive measures to use, or what agency or clinic to call upon for services. For example, a child who turns up the radio or TV to a very high volume may, in fact, be developing a hearing problem, and should be taken for a hearing test before the problem gets too serious.

Basic Principles

The principles and content of casefinding are similar to those used in any initial encounts, between a family and a health worker. Training

for this function includes:

- o Gaining a general knowledge of the community
- o How to read maps and locate addresses
- How to locate families that have moved from a particular house or neighborhood
- o How to make a first visit, especially where there has been no previous appointment
- o How to introduce oneself and the screening agency
- How to state the purpose of the visit.

These, of course, are part of the broader objective to develop communication skills, and to learn how to conduct interviews so that the family has sufficient time and opportunity to ask questions, express fears or dislikes, and make comments.

Methods

Following is a typical list of tasks for the worker doing casefinding or outreach:

- o Locate and contact individuals and families
- \boldsymbol{o} $\mbox{ Give specific information about the program and other related <math display="inline">\mbox{ services }$
- Ask questions and listen to the family in order to obtain necessary information about health conditions and problems
- Identify attitudes and cultural or other barriers that might prevent the family from using EPSDT or related services
- o Discuss health problems of concern to the family
- Coach the family in terms of starting a course of action around prevention, control and remedy of problem situations

-CONTINUED

- Where problems suggest the possibility of an immediate solution, refer the family to the appropriate service or agency, and help make any necessary appointments
- Observe behaviors which will help the family and the program staff develop an early awareness of the family conditions and needs
- o Interpret and explain any instructions, messages or other information which will make it possible for the family to understand, have access to, and make use of the EPSDT program services.



Door-to-door visiting is undoubtedly the most productive form of casefinding. But there are several difficulties with this method, some of them economic. If the eligible (Medicaid) families are widely dispersed, transportation and the time involved for the outreach staif may be a problem. In some central cit, exect the design

of the buildings and the level of crime may pose difficulties. Team outreach may be helpful here, particularly if one member of the team is a representative from a community-based organization. Further, the teams might work from a chauffered car so that the driver can park close to the building entrance, keep an eye on the car, and be of help both if a situation requires immediate referral and if the outreach team is subjected to some harassment.

A door-to-door visiting program should be preceded by an informational and promotional campaign which includes the information that health workers will be making home visits in the neighborhood for EPSDT. Wherever possible, the visits should be made by appointment; many families will have telephones.

When doing door-to-door campaigning, the outreach workers should be prepared to refer all families after explaining the benefits of the program. If the family is not on Medicaid but appears eligible, the outreach worker might suggest visiting the local welfare office to check out whether or not the family is indeed eligible for Medicaid. The outreach worker might also refer non-Medicaid families to other agencies or clinics that provide services to low-income families free of charge, or at a minimal fee.

A fairly innovative method for successful casefinding will result if EPSDT staff roles are made interchangeable. Early in the program, staff members—doctors, nurses, everyone—should be rotated through the casefinding function so that professional as well as paraprofessional understands what outreach can and really should be. This will enable staff members to learn directly about the needs and desires of the families to be served. Personal contacts of this kind can do much to break down barriers, motivate the family to enter and remain in the EPSDT program, and result in a level of care which is of higher quality and more satisfying for the EPSDT staff.

Furthermore, when managers, trainers and supervisors have this kind of practical experience outside the walls of the program, both the training and services stand a better chance of being relevant to the real world. Thus, while all staff members are learning more about attitudes and needs, program managers can make necessary modifications in service and help mobilize community resources in support of EPSDT objectives.

Distribution of flyers or pamphlets can be used instead of, or in addition to, home visits. This distribution can be door-to-door, or the flyers may be left at natural places of congregation: schools, churches, clubs, stores, or other places in the neighborhood where we know the parents or children are likely to go. A flyer would contain information such as what services are to be given, who qualifies, cost for non-eligible children, and the place, date and time of testing. Maturally, more information can be included, but in so doing, there is always the risk that people will not bother to read the flyer at all. And of course if the neighborhood is bi-lingual, the flyers should be as well. (See page 69 for a sample flyer.)

Contact could be made with the media—newspapers, radio, TV—which will often provide space or time free of charge as a public service. Many areas have newspapers or radio and television programs directed to language or ethnic groups, and these media often welcome interviews and human interest stories that programs such as EPSDT can offer. You will want to find out which papers are most popular in the neighborhood, what radio programs are most listened to, and what are the best times to have your message broadcast.

Working with schools, community groups, PTA's, churches, ethnic groups, and the like, can also be very profitable in casefinding. These organizations not only are able to reach large numbers of people at one time, but they are likely to have a serious interest in services for



FREE HEALTH CHECK-UP FOR CHILDREN
AND YOUNG PEOPLE

Medi-Screen is a more convenient name for "Early & Periodic Diagnostic Screening and Treatment Program." It is part of a federal program for AFDC children, intended to provide for early detection and correction of medical problems which might otherwise go uncared for.

The Department of Social Services has made arrangements for AFDC children and young people (under 21) to receive <u>free</u> Medi-Screen checkups. A Medi-Screen checkup includes:

- 1. A medical history
- 2. A complete physical examination, including evaluation of development
- 3. Vision and hearing tests
- 4. Dental examination
- 5. Blood and urine tests
- 6. Sickle cell and venereal disease testing, when appropriate
- 7. Immunizations
- 8. Referral to further diagnosis and treatment

(IMPORTANT NOTE: Children found to have medical, dental or visual problems will be referred to places which will accept Medi-Cal cards and will take the patients referred to them. A referral slip from the Medi-Screen program is the same as a "prior authorization" and takes the place of a MEDI sticker.)

No Medi-Cal stickers are required for this checkup, but each child's Medi-Cal card must be presented.

R movable Medi-Screen clinic will be set up in different locations throughout the County on various dates. The <u>complete</u> Medi-Screen checkup will be given to each child on this convenient. "One scop" basis. The next clinic will be open:

Sat. & Sun., July 13 & 14: 9-12 A.M. 1-5 P.M. East Valley Health Center 1989 McKee Road, San Jose

To arrange a Medi-Screen checkup for a child or young person, fill out the form below and send before July 9, 1974.

Medi-Screen

55 West Younger Avenue

San Jose, California 95114

Phone 299-2155 if more information is required or you need help with transportation.

The following children will take the MEDI-SCREEN Health Review:

First Names

We will come on Saturday, July 13 AM PM
Sunday, July 14 AM PM
We want information on future MEDI-SCREEN dates.
Our usual place for health care is

We prefer a later date
Date of last checkup
Phone Number

Print Family Name:

Address:

Signeture of Perent or Guerdian

Self-4

We will need help with transportation:

un nuevo beneficio <u>GRATIS</u>...

MEDLSCREEN

IEDI-SCREEN

EXAMEN MEDICO GRATIS PARA NINOS Y JOVENES

Medi-Screen es un nombre mas fácil para un programa diagnóstico para el descubrimiento
y tratamiento temprano de enfermedades y otros problemas de salud en niños. Es parte de un programa del gobierno federal para los ninos en AFDC (Ayuda para Familias con
Minos Dependientes), y tiene el propósito de descubrir temprano, y corregir, problemas
medicos que pueden empeorar sin tratamiento.

El Departamento de Servicios Sociales ha arreglado exámenes Medi-Screen gratis para cada aíño y joven en AFDC menor de 21 anos. Los exámenes incluyen:

- 1. La historia médica del paciente
- 2. Examen físico total, inclusive examen del desarollo mental
- 3. Examen de ojos y oídos
- 4. Examen dental
- 5. Pruebas de sangre y orina
- 6. Pruebas especiales para la anemia "sickle-cell", y de enfermedades venéreas
- 7. Vacunas, cuando se necesiten
- Cartas de referencia a un lugar en donde se puedan conseguir más diagnósticos y tratamientos, cuando sea necesario.

FIJESE BIEN: Los niños que tengan problemas médicos, dentales o visuales se mandarán a lugares que aceptan la tarjeta Hedi-Cal y que aceptarán a los pacientes mandados. Las cartas de referencia del Hedi-Screen sirven de "autorización de antemano" y se usa en vez de un cupon "MEDI."

to recesitan cupones para este examen, pero sí hay que presentar la tarjeta Medi-Cal \mathbf{e} \mathbf{e}

La clínica Medi-Screen estará en varios lugares por todo el condado, en ciertos días. Todos los exámenes mencionados se harán en el mismo lugar, el mísmo día, sin que los pacientes tengan que ir de un lugar a otro. La proxima clínica es:

Sábado y domingo, el 13 y 14 julio 9 - 12 a.m. 1 - 5 p.m. East Valley Health Center 1989 McKee Road, San Jose

Para, arreglar un examen Medi-Screen para sus niños o jóvenes, llene la solicitud aqui abajo y mándela <u>antes de 9 julio</u> a:

55 West Younger Avenue

San Jose, California 95114

Hable a 299-2155 si necesita mas información o si necesita ayuda con transportación.

	Edad	Queremos venir el sabado 13 julio AM TM
		Queremos venir el domingo 14 julio AM PM
	 ·	Queremos información sobre fechas para Medi-Screen en el futuro
		El lugar en que recibimos servicios médicos (por
		lo general) es
		Preferimos venir en una fecha mas tarde
pellido:		
irecton:		
Taléfono:	-	Firma del padre o madre

and the trop of the Ach

children. Community leaders and coalitions of community groups can offer enormous help in disseminating information and in providing volunteers for outreach and other EPSDT tasks.

After an EPSDT program has been going on for awhile, word-of-mouth probably becomes the best method of outreach. And in a successful program, less and less outreach effort becomes necessary as families hear about the services and either telephone for an appointment or drop in.

Since EPSDT is an on-going program which aims to knit together a system of comprehensive and continuing care, it may be economical in the long run for the program itself to provide some sort of mini-bus arrangement, not only for bringing families to the screening center, but also to provide transportation when children are referred to other services. From a management standpoint, such transportation may greatly increase utilization of the program and actually reduce per-patient cost. In some communities, transportation may be available from or shared with other service agencies such as Red Cross. Cars with drivers can, of course, be contracted for; or cars can be leased and volunteer chauffeurs used. In the latter case, it is important that the EPSDT agency be properly insured to protect both the agency and the volunteer.

Baby-sitting is important so that the mother does not have to bring her children—other than those being screened—to the clinic. Most communities now provide some sort of child care service that the mother can use for this purpose. If the EPSDT center has the space, a room or area can be set aside as a "kiddie corral" which might also be supervised by volunteers, or by paid employees recruited from the community (perhaps older men and women), all trained as part of a special effort of the EPSDT program.

If the parent is handicapped or otherwise unable to accompany the child to the clinic, provision should be made for the community health worker to bring the child.

Casefinding is a painstaking process. It involves empathy, understanding and patience. Health workers must be able to perceive the concept of community responsibility, and be aware of the agencies through which that responsibility is expressed. By gaining some understanding of the whole health system, the health worker will be able to insure well-rounded, total family care and convey with conviction the value of the EPSDT experience.

Exercises

- a. If the Screening Program performs outreach:
 - (1) Explain the outreach methods used by your program.
 - (2) Which outreach methods do you believe are most effective, and why?
 - (3) Which outreach methods are least effective, and why? What improvements would you suggest?
- b. If the Social Service Agency performs outreach:
 - (1) Explain the outreach methods used.
 - (2) Which methods are most effective? Why?
 - (3) Which outreach methods are least effective? Why?
 - (4) What improvements might your program recommend to the Social Service Agency?
 - (5) How might your program assist the Agency to make these improvements?

WORKBOOK IV

A TRAINER'S VIEW OF SCREENING TESTS

This workbook describes in some detail the individual screening tests in which the trainee will have to develop competence. As we have mentioned earlier, the tests included in a particular screening program will vary, as will the procedures and equipment for performing them.

Equipment and supplies generally come with adequate "how to" instructions for their use. The skills which the physician, nurse or other health worker will want to convey to the trainee will be attained largely through on-the-job, supervised experience. Why, then, do we need this workbook for the individual screening tests? The answer is that the trainee has to understand why we give each particular test, what results we should expect from it, and how it relates to the total health of the child. The trainee must also learn how to convey this information to the parent and child. And finally, the trainee must learn how to perform the test in a manner which is proficient and gains the confidence of the child and family.

The component screening-test workbooks which follow are not intended to cover every type of test procedure. Rather, they are intended to provide an overview and check-list for the trainer, and information and guidelines for the trainee, generalized enough so that program variations and modifications will not significantly reduce the training value of this material.

The workbook does not assume that we are training an interviewer, audiometric technician, leb assistant, or nurse's aide. Instead, it assume that we ere going to train a <u>family health worker--a combination</u> of community worker, health technician, health educator, counselor and advocate. The purpose of the training is not only to

develop this multiplicity of skills, but to build a training base which will give the health worker a functional mobility advantageous to him as well as the program.

Some of the tests described below will not be part of your program.

They should nevertheless be made familiar to the trainee, particularly if they are being done by another agency in association with you.

WORKBOOK IV-A

CHILD AND FAMILY HISTORY

I. Medical History-Taking: Rationale and Technique

II. Screening Objectives: Categories of Questions

- 1. Child's birth history
- 2. Child and family illness history
- 3. Infant feeding
- 4. Gastrointestinal (digestive)
- 5. Genitourinary
- 6. Respiratory
- 7. Allergy
- 8. Skin
- 9. Cardiovascular
- 10. Neurological and musculoskeletal
- 11. Mouth, nose and throat
- 12. Eyes and ears
- 13. Psychosocial
- 14. Discussion and Guidance; miscellaneous questions
- 15. Appendix

I. Medical History-Taking: Rationale and Technique

There are many ways to look at any health delivery system. One way of viewing EPSDT is as a health information system which will expand our knowledge of child and family health generally, and of the health of each individual child we can bring into the program.

One objective of EPSDT, then, is to "profile" the health of the child. while recognizing that such a profile cannot be complete unless we , also look at the child's immediate family, and at the larger social, ethnic, economic or geographic family that surrounds and affects the child.



HEALTH PROFILE

The EPSOT health profile depends on three major sources of information:

- A <u>History</u> of the child and family, taken from <u>questionnaires</u> and <u>interviews</u>.
- 2. Observations by the nurses and physicians as they do the "physical examinations," and by all of the health workers as they guide the child and parent through the program.
- Tests and Measurements for such things as vision, hearing, body growth and development, blood and urine.

Any was of these sources of information may result in findings which need to be referred beyond the screening process to a physician or other specialist for further interpretation and evaluation. And although it is the history that concerns us in this guide, we must not forget that all three of these sources of information must be combined and seen as a whole before judgments can be made about diagnosis or treatment.

The screening process will usually begin with a questionnaire to be filled out by the parents or other responsible adult familiar with the child's health history. This questionnaire, and the interviewing or assistance that accompany it, are the parent's introduction to your program, and it is important that this introduction be done with care and interest.

Language is our major means of communication, but we all know that it is also a barrier. For example, if the child or parent is Spanish-speaking, obviously the questionnaires should be printed in Spanish or be administered by a bi-lingual person. Equally obviously, the parent should feel free to ask for an explanation of any question that is not clear. A vague or unclear question is not necessarily a bad one if it leads the parent into offering additional useful information.

Few questionnaires, particularly is a reening organ, all ask everything we need to low in order to in an order to its.

And some questionnaires are written from a recommendation until viewpoint that is not unit foreign to the control of goals of the program.



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The history and questionnaire are part of the patient profile that the specialist will look at if the child needs to be referred. That specialist may very likely not have the time to take an in-depth history; be will depend on the patient profile, and on the health worker's skill in helping to avelop it. Many health problems can be detected most quickly and affectively by questioning the colin and the parents, and listening cartolly to that they have to say. The questions are necessary because the same transfer and are required to problems, there are a recall scoulage all a are required to detect them, or measure the medical samificance of an easily observed symptom is an average that seedical samificance of an easily observed

Every question of a terry total should revide uple space for the health worker' notes to comments. The history-taking process is not an easy one, he has a riocce one by taking process is not an easy one, he has a riocce one by taking process is not an easy one. He has a riocce one by taking the information, from the state of the late of the

- We need to called a liveble amount of voluntary information
 from the parent both within and outside the regular format
 of the questionnaire.
 - o Because he it is a substantion of many action besides disease we have to have some property of ormation: the economic, cultural, and all of republical factors that have a bearing on health.
 - o The family health worker must be able to sort out and record aignificant data to pass on to the specialist.
 - o In the process of receiving this data, the family health worker : must continually involve the child and parent in an educational

process which will continue after the family returns home.

EPSDT programs will vary in their view of the who, what, where and when of history-taking. We think that the best model, where practicable, calls for the following steps:

- o the parent to provide most of the history
- o the health worker to review that history with the parent so that both of them (parent and health worker) can make additional comments
- o a procedure set up so that the history (questionnaire and other forms) accompanies the child through all of the tests, where other health workers can add their comments
- o the entire history, together with test results that are already available, should be reviewed by the health worker at the end of the screening process. The physician or nurse should join in the review whenever necessary.

Answers to a standard set of questions can help identify those children who are "at risk"—that is, children who may have a significant health problem and who therefore need to be referred for further evaluation and diagnosis. It is necessary to remind ourselves continually that screening is not diagnosis. All that we are trying to do with our screening information is identify two groups of children: those who have a significant health problem or may develop one, and therefore require further attention, and a second group which is "at low risk" and needs only to be scheduled for the next screening visit.

An item of information from the history is useful in several ways:

 It may in itself alert the screening staff to a problem not revealed by the tests or by the nurse or physician during regular observations.

- It may not in itself indicate a problem, but when combined with an item of information from a test or medical observation, will indicate a condition requiring our specific attention.
- It may not indicate a problem, but is part of the background
 of information that enables the physician or other specialist
 to make some important judgments about the health of the child.

Thus, the <u>history</u> becomes the major support of information derived from the tests and observations of the child.

We have said that the history-taking can be done in two ways—through a printed questionmaire, and through an <u>interview</u>. The <u>questionnaire</u> has several advantages:

- (1) If it is completed at home, the parents can do it together (perhaps with help from other members of the family). They will feel under less pressure, and will have more time to look up information or reflect on a particular item.
- (2) It is sometimes easier to answer questions in writing--particularly when they seem embarrassing--than to talk about them face-to-face with an interviewer.
- (3) It saves staff time.

The interview has the advantages of:

- (I) Personal contact.
- (2) The opportunity to explain questions, clarify answers by asking additional questions not on the form.
- (3) Reassuring the parent when a question seems threatening.
- (4) Providing an opportunity for interaction between the health worker and the parents.
- (5) Recording information from illiterate and partially illiterate parents and from small children.

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Why do we need to consider history-taking as part of an EPSDT training program? Because it is not simply a matter of getting some forms filled out, or getting ensuers to a standard set of questions. The

purpose of the questionnaire/interview is to get information about the child and family which will not only tell us something about the child's health today, but also provide some clues to his or her health in the future. The questionnaire/interview must be used by the health worker to create a climate for encouraging questions and discussion. Every member of an EPSDT staff needs to become a family-oriented health worker who sees the child as a person whose health and state of well-being are affected by many different things. The history developed through the questionnaire/interview must tell us something about the health attitudes and practices of the family as well as the



health status of the child. In other words, the history should try to describe a pattern of health from which we may be able to anticipate some problems and do something about them before they become too serious.

Questions included in the EPSDT history will not vary much from program to program. What will vary, and what is important here, is the way in which the questions are asked. The skill of the health worker has a direct bearing on the quantity and quality of information that goes into the history.

First of all, it is obviously necessary that the parent understand the question. This means that the health worker must understand it also—not only what the question means, but why it is being asked.

Secondly, the health worker must recognize when to "open up a question"—when to explore a particular subject further, whether during an interview, while reviewing the completed questionnaire with the parent, or at some other appropriate time.

The EPSDT staff member must therefore have the interviewing skill to:

- (1) encourage communication by the parent
- (2) record all information that may be important
- (3) make sure that the information collected is as accurate as possible
- (4) be able to explore and interpret answers that may yield important information beyond the "yes or no" replies to the standard questionnaire.

This means that the staff worker must also have enough knowledge and experience to avoid giving ensuers or making comments which may sound

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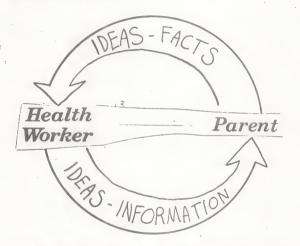
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much health information as possible must be balauced spainst the danger of barassing the parents or intruding upon their privacy. The desire to make the parents comfortable, to develop an easy exchange of information, must also be balanced against the program's need to function economically and reach a large number of families. This leads to the question of whether the screening interview should also be a



health information and counseling process. We think that it should. It is a major goal of EPSDT to have some impact on the health knowledge, attitudes and practices of the families whose children are screened. The questionnaire and interview provide this opportunity. The parent does not have to look upon the questionnaire as "another bureaucratic form to fill out," or the interview as another "hosing about our private business." Instead, there should be an exchange between the parent and health worker. The items of information should come from the parent as ideas about the child as well as facts, and these should be exchanged for information and ideas from the interview about good health practices. The style of the interview should always be a sharing of concerns.

This "exchange" process of interviewing emphasizes the need to rely on the competence and good judgment of the health worker rather than on long, detailed sets of questions. Forms should be short, simple, easy to use and read. They should be designed as a check list, leaving it to the health worker to add any details or observations he or she thinks necessary. And the health worker's comments should be in simple, natural language which everyone—parents, physicians, other health workers—can understand quickly.



Written comment will, of course, be necessary where a "yes" or "no" answer still leaves us in doubt. As examples:

"Are you a heavy smoker?" If the answer is "yes," the interviewer should ask how many packs a day, and write down the number.

"Does your child often seem tired?" The parent may wish to qualify the answer by saying: "Oh, maybe every now and then," or "Only after playing," and these answers should be recorded.

Before deciding to write down a comment, the health worker may want to "branch out" into some other questions. For example, with the foregoing question—"Does your child often seem tired?"—if the parent answers "yes," or hesitates before answering "no," the interviewer should branch out further. If the answer was yes, we could ask such questions as:



"Do you have any idea why your child often seems tired?"
"Have you just noticed this lately?"

"How many hours of sleep does your child get?"

or if the answer was a hesitant "no:"

"Do you think your child gets enough sleep?"

The "branching" technique is just another way of saying that we can get most out of an interview or questionnaire by passing quickly over the "no" answers (which mean "there doesn't seem to be a problem here") and spending a little more time with further questioning when the answer is "yes" (meaning, "there might be a problem here"). In most cases, the branching questions will simply ask "when," "where" or "what kind?" Sample questions used in this workbook and in most questionmaire forms will start with the phrase, "Does your child...?" However, in talking with the parent, the health worker should use the child's name—for example, "Does Ernesto often seem tired?"

Parents in the community working as volunteer or part-time interviewers can be most effective in helping develop the EPSDT history, rephrasing the questions or adding to them so that there is a better exchange of information. But the private nature of many of the questions must be recognized, and care taken that the community does not feel that confidentiality has been overlooked.

II. Screening Objectives: Categories of Questions

In this section of the workbook, we have grouped together the kinds of questions that are generally asked in EFSDT screening interviews and questionnaires, together with some explanations and comments as a background for the more detailed and specific instructions provided at the clinic site.

The questions are grouped here (as they often are in questionnaires) according to the body "systems" commonly used in medical care. The purpose is not to list every question that might appear on the form used in your program, but rather to indicate the kind of information the physician needs.

If the answer to one question in a "system" group indicates a possible problem, the health worker should explore other questions in that group or of that type (whether or not they appear on the printed form), using them as a basis for discussion with the parent, and noting on the questionnaire any parental attitudes or comments that seem significant.

Those questions which the health worker does not understand should be reviewed carefully with the pediatric nurse practitioner or physician working with the program. In no event should the health worker be left simply to record "yes" or "no" answers without an understanding of why they are being asked or an expectation of the kinds of questions the parents may ask in return. Again, this does not mean that the interviewers must either diagnose or give "medical" explanations; but they should become adept at recognizing health clues and tracking down danger signals.

In addition to health questions, every EPSDT clinic will have its own procedure for obtaining and recording identification data (name, address, employment, marital status, etc.). Wherever possible, these questions, particularly as they relate to program eligibility, should be kept separate from the medical history-taking process.

1. CHILD'S BIRTH HISTORY

The health of the child of course has some of its origins in the pregnancy of the mother, and an EPSDT interview/questionnaire will therefore generally begin with a maternal and family history.

It will be important to learn if the mother, during pregnancy, had high blood pressure, diabetes, German (3-day) measles, a venereal disease such as gonorrhea or syphillis, a urinary tract or other kind of infection, high fever, or other health problems.

It may also be important to know if the mother was taking medicines prescribed by her doctor, was a heavy smoker, or was dependent on drugs or alcohol. As mentioned earlier, answers to these last questions may be difficult to interpret unless the health worker adds some further information—for example: how many packs of cigarettes each day? what kind of prescribed drugs (if the mother remembers)? and so on.

Questions about the mother's pregnancy will almost always include whether the child was premature, whether the birth was multiple (twins or more), whether the delivery was normal, and, if not, whether it was breach (feet first) delivery or Caesarean delivery. The baby's weight at birth is also necessary to know, and whether there was an Eh problem.

The EPSDT questionnaire may also ask for data on the birth history of other children in the family; whether the mother ever miscarried; and perhaps the ages, heights and weights of the parents.

2. CHILD AND FAMILY ILINESS HISTORY

The child's medical history must, of course, include any illusions, accidents or diseases surfered, and a record of any hospitalization. The most common childhood disorders are usually listed in YES-or-MO suestion form.

fut the child a solical blocory sust also include a record of the illuses of any sale; so or soler of the child's household. This family record is important for entered reasons:

- (1) The distance of last collative may be communicable (e.g., TB or here that.
- (2) Children and a real agention—a tendency to develop a discussion block to a family history, even though the discussion on the butteriorary in the usual sease (e.g., diabetes).
- (3) Some and allowers may reflect eating habits or living command a writer are insurant in assessing the total health

A. IN WAR TO ENTINE

reading tobless may me relate to avariety of health conditions—

from mother and the relation to such special problems as
the child's colerate of make, at the child's tendency (though offered
milk) to develop anemia without the mother's being aware of it.

During the first year, the infant will eat almost everything that is offered, and the concern of the mother is usually over the distribution or vomiting caused by overeating. In the second year, however, the child begins to eat less because it is growing less, and also begins to

develop food likes and dislikes. This may make the parent feel that the child is eating too little, but unless there are indications of real feeding problems, the health worker should encourage the parent not to worry about force-feeding and instead direct her or his concern to the overall composition of the diet (is it all starches and sweets, or meats and vegetables as well?) and to the general activity and well-being of the child.

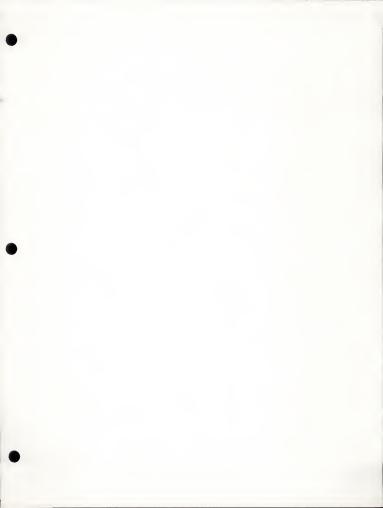
Some typical questions (and some branching questions for "yes" enswers):

- a. Was (is) your child breast fed? Bottle fed? (At what age was your child taken off the breast or bottle?)
- b.- Is your child on formula? (Are there any problems with it? Were there allergic reactions? Did you change formulas?)
- c. Do you think your child is having any nursing or feeding problems?

(In what way?)

- d. Has your child had to be force-fed?
- e. How much milk does your child drink in a day?
- f. Does your child have a problem eating any particular kinds of food?
- g. Are you giving your child any vitamins, minerals or "fortifiers?" (What kind?)

Further questions or discussions might include the subject of a might bottle, solid foods, night crying, the other parent's help is caring for the child, and so on.



Wednesday morning, the last of Monday's breakfast will be ready to leave the large intestine.

In young children, gastrointestinal (stomach and intestine) disorders often occur in the form of:

Womiting. Perhaps indicative of pica.

Biarrhea. This looseness of the bowels may be a symptom of many digestive tract disorders, or it may be caused by intestinal irritation. If the diarrhea is mild, it may be the result of the baby's formula or of over-feeding. If more severe, the diarrhea may be due to a food allergy or infection.

Constipation. Symptoms of this condition, in which passage through
the intestinal tract is stopped or slowed down, include cramps
and womiting.



- Colic. The cause of this disorder (in which the baby brings
 her or his legs up to the abdomen and cries) is not too
 well understood, although it may be due to the way in which
 the child swallows air, or perhaps to its diet. If the colic
 seems serious, a complete examination by the pediatric nurse
 practitioner or physician will be necessary.
- <u>Colitis</u>. An inflammatory condition of the colon (part of the intestine).

Every health worker, like every parent, should be familiar with these disorders and symptoms—the health worker because she or he needs to ask sensible questions and not just read off words from the question-naire. But again, this does not mean that you can or should make a diagnosis.

Some typical questions (and some branching ones):

- a. Is your child often sick to his or her stomach? Does he womit or spit up a lot?
 - (When? After meals? How long after?)
- b. Does your child have trouble swallowing?
- c. Does your child strain with her or his bowel movements? (Do you give your child any kind of medicine for this? Exec you noticed anything different about the child's stool?)
- d. In the last six months, has your child had:
 - any special diet or food restrictions?
 (Doctor's orders? Friend or neighbor's suggestion?)
 - excessive burping or gas?
 - (Do you think your child burps too much? passes too much gas? if so, when?)
 - frequent stomach aches or pains?
 (When? After eating?)

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5. Genitourinery

The genitournery system includes the kichays, bladder, wreters, and therethre. In the make, the system also includes the penis, scrotum and testes (testicles), and in the temple the two overies, the tellopien tubes, the uterus, and vagine.

-frequent diarrhea?

(Did this follow a change in formula or diet?)

- loose bowels for two days at a time?
 (Have you been giving any kind of medicine?)
- thave you been giving any kind of medicine?)
- e. Were your child's bowel movements ever black or bloody? Did you see any mucus or worms?
- f. Has your child ever vomited blood? (When?)
- g. Does your child eat everything the rest of the family does? Are any foods troublesome?

5. GENITOURINARY

The genitourinary system includes the kidneys bladder, ureters (the tube) conducting the urine from the kidney to the bladder), and urethra (the camal that passes the urine from the bladder and out of the body). In the male, the system includes the penis, scrotum and testes (testicles), and in the female the two ovaries, the Fallopian tubes, the uterus and the vagina. In the male, the urethra passes through the penis; in the female, it has a reparate opening from the vagina.)

There is a large number of childhood disorders and complaints involving the genitourinary system, and some of the symptoms are indicated in the questions below. Abnormalities at birth involve the genitourinary more frequently than any other, and these abnormalities may be one of the causes of urinary tract infections. Most EPSDT guidelines will recommend screening for bacteria in the urinary tract of females and the urinary tract of females are the cours most frequently, and this procedure is described in section IV-I of this workbook (Bacteriuria).

Some typical questions (and some branching ones):

- a. Do you think your child urinates too.aften? (Does he drink a lot of fluid during the day? How often?)
- b. Has your child ever:
 - had pain when urinating
 - had a burning feeling or had to strain to pass urine?
 - had blood in the urine?
 - had brownish urine?
 - had an inflammation or discharge from the vagina/penis? '
- C. Does your child bed-wet or pants-wet (beyond her/his age) ↑ to bet vary
 (How do you handle this? Does it seem important?)
- d. Does your child's urine have a strong odor? (Frequently? Have you mentioned it to a doctor?)
- e. Does your baby have lumps on his or her stomach or elsewhere on the body that might suggest a hernia?

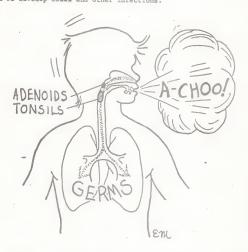
6. RESPIRATORY SYSTEM

The respiratory system—nose, pharynx, larynx, trachea, bronchi and lungs—provides our body with necessary oxygen and gets rid of carbon conoxide. Three things happen to the air we breathe in:

- It is cleansed: tiny hairs at the entrance of each nostril trap dust particles.
- It is moistened: mucus in the linings of the air passages pass water to the air. (The mucus linings are also a back-up system to catch dust.)
- o It is warmed to body temperature: the mucus membranes contain tiny blood vessels which heat the air to body temperature.

The respiratory system also helps filter harmful bacteria from the air

we breathe before they enter sensitive areas. The throat (pharynx) holds tonsils and adenoids that screen bacteria. Despite these safeguards, however, germs do manage to enter the respiratory tract, and then we develop colds and other infections.

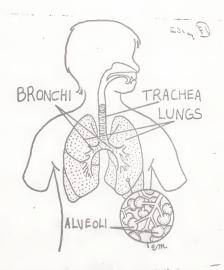


Colds are infections of the nose, throat and linings of the sinus cavities. To combat cold germs, these linings swell and develop mucus to wash away the germs. The mucus builds up and blocks our air passages—the reason for stuffy noses and hacking coughs. These symptoms of the common cold have no particular significance for a screening program unless they are persistent, or more severe than we would normally expect; or when taken together with other symptoms, they may give a basis for electing the physician to a potential problem. For the symptoms of a cold in those cases may indicate such serious

disorders as measles, strep throat and whooping cough. Conversely, symptoms of TB, hay fever, allergy or emphysema may be mistaken for a common cold.

The questions in the screening interview try to sort out these symptoms, but the health worker should explore further with the parent any evidence of repeated breathing problems.

Between the throat and lungs is the body's main air passage—the trachea, or windpipe. In the chest, the trachea divides into two branches—an inverted Y from the throat to each lung—called the bronchi. In the lung, each branch divides again and again. These



branches (bronchioles) look something like the bare branches of a tree. They extend to all parts of each lung and end finally in groups of tiny air sacs—about 600 million in an adult's lung—called alveoli. They make up the sponge-like mass of each lung and perform the essential process of transferring oxygen into the blood stream and taking out the carbon dioxide.

Some typical questions (and some branching ones):

- a. Has your child ever had:
 - periods of difficult breathing?
 - a tendency to wheeze when breathing?
- b. Do you know if your child is allergic to anything?
- c. Boes your child cough a lot or gasp for air? (Do you give your child cough drops or medicine? Does your child often have a sore throat?)
- d. Is your child often hoarse?
- e. Boes your child:
 - have rattling sounds when breathing?
 - get short of breath easily?
 (When? After exercises?)
 - cough up thick spit (phlegm)?
 - seem to sweat too much?
- f. Boes your child get many chest colds? (How frequently?)
- g. Has your child ever had pneumonia?
- h. Does your child have hiccups? Breathe irregularly?

7. ALLERGY

Allergy means that a person has body cells that are particularly

sensitive to a certain substance or substances. These substances are called <u>allergens</u>, and they cause different kinds of reactions in different people. A child may show a reaction to only one allergen, but usually more than one is involved.

Allergens include:

- a. Things the child may breathe in (<u>inhalants</u>), such as pollen, perfume, tobacco smoke, or various kinds of dust.
- b. Certain <u>foods</u>, the most common of which are fish, eggs, chocolate, nuts, strawberries and tomatoes.
- c. Things that act on the skin (contactants), such as insecticides, fur, wool, cosmetics, and certain plants and detergents.
- d. Certain drugs or medicines.
- Certain parasites, bacteria and fungi (infectious agents), and insect bites.
- Physical agents, such as heat, cold, sunlight animals and birds,) may cause a reaction.

One can see that the possible list of allergens is very large, and is becoming larger as the medical profession learns more about this complicated subject.

Reactions occur in two major areas—the respiratory system and the skin—and take such forms as meezing they fever, smarting of the eyes, rashes, hives and welts. If the physician suspects an allergy, she or he will take a detailed history of the child, and probably do some skin tests to narrow down the suspected list of allergens.

Treatment will probably center on avoiding the identified or suspected allergens. For example, changing a diet, or keeping the child away from animals, or not using woolen clothing. If this does not work, the physician may recommend desensitization, which means that the child will be injected with small doses of an extract of the allergen over

a long period of time until the body "learns" to tolerate it.

The EPSDT questionnaire/interview cannot provide the history the physician needs to diagnose an allergy, but the kinds of questions listed below will indicate possible allergic reactions, and should lead the health worker to inquire further of the parent. For example, if allergy is suspected, the interviewer should note any food which seems to produce allergic symptoms. Children's dislikes are often protective—the food really does not agree with them—and should not be passed over as "stubbornness" or a "behavior problem" until allergy is ruled out. Similarly, it should be remembered that allergic children are affected very unfavorably by fatigue, excitement, over—exertion and other stress.

Some typical questions:

- a. Has your child ever developed:
 - rashes or swellings after eating certain foods?
 - hives or swellings after being stung by a bee or other insect?
- b. Does your child develop a stuffed nose, red or watery eyes:
 - in the early spring or fall?
 - when near cats, dogs, horses or other animals?
 - when wearing fur or woolen clothing?
 - when covered with woolen bedding, or when using pillows?
- c. Is your child allergic to any medicine, for example, penicillin?

8. SKIN

Skin problems existing at the time the child is screened will be noted by the physician or nurse doing the physical assessment (examination). The questionnaire/interview should reveal any significant skin disorders which the child has had in the past. Some of the more common problems are described briefly in the paragraphs below.

Heat rash, diaper rash or prickly heat (Miliaria). This condition is the result of sweating. The sweat pours into the outer portion of the skin, but the sweat ducts are blocked and small eruptions occur. With children the sweating may be caused by sunburn or exercise or, in the case of infants, a diaper rash caused by too long use of a wet diaper.

Acme. This disorder is related to hormone activity, and affects the majority of teenagers at one time or another. Its symptoms are black-heads or eruptions around the face and upper part of the body. Certain foods such as chocolate, nuts and colas may aggravate acne in some patients, although more visible damage may be done by home attempts to get rid of the blackheads. Its importance to the health worker is in recognizing the emotional effect that the disfigurement of acne may have on boys and girls who may not accept the reassurance that the disorder is a temporary one. "The adolescent is likely to use acme as an excuse to avoid difficult personal adjustments and may become withdrawn and self-pitying. Tension may bring out intrafamily antagonisms, particularly between mother and daughter."

Impetigo. A superficial skin infection, highly contagious in infants and young children. The rash, which may cover the whole face and body of a baby, often has the appearance of weeping sores which may be covered by scabs or honey-colored crusts.

Fever blisters; cold sores (Herpes Simplex). Localized viral infections which may remain dormant until the skin is over-exposed to the sun, or the child has a cold, or there is some physical stress or emotional disturbance, or perhaps the child has eaten certain foods. The lesions (breaks in the skin tissue) may appear anywhere, but are most likely to show around the face and mouth. Symptoms in young children may

include fever and irritability.

Dermatitis. A term which includes various types of acute or chronic superficial inflammation of the skin. It may show itself through blisters (vesicles), redness, oozing, crusting or scaling. The term eczema is used to indicate chronic dermatitis. Contact dermatitis is an acute or chronic inflammation caused by a wide variety of substances which come in contact with the skin and cause an allergic reaction (for example, poison ivy, certain chemicals, cosmetics, wool clothing, animals, and certain foods).

<u>Hives.</u> These are also an allergic reaction (primarily to foods), and for which there is generally no treatment except identifying the allergen and avoiding it.

Some typical questions:

- a. Does your child have any skin problems? Frequent sores?
- b. Has your child been troubled by eczena, hives or rashes?
- c. Is your child:
 - having a problem with pimples? carbuncles?
 - sweating too much?
- d. Does your child's skin appear to be too oily? too dry?
- e. Has your child:
 - -developed skin bruises for no apparent reason? bruised easily?
 - -had trouble in stopping small cuts from bleeding?
 - -been frequently scratching or rubbing? appeared to be itchy?

9. CARDIOVASCULAR SYSTEM

Cardiovascular problems are those relating to the heart, blood vessels, and the circulatory system. The questions in this category focus on

hypertension and on the detection of rheumatic fever and congenital

The exact causes of rheumatic fever are not known. Heredity may be important, but occurrence of the disease is usually related to a type of "strep" infection. Such infections are more common where there is overcrowding and malnutrition, so that there tends to be at least an indirect causal relationship between poverty and rheumatic fever. Symptoms may not appear immediately, or they may pass unrecognized.



Typically, the child may have just had an upper respiratory infection such as tonsilitis, but while convalescing may have developed fever and arthritis with body joints becoming swollen and painful. Equally important to know about is a low-grade type of rheumatic fever seen especially in young children. Here, the symptoms may be mild, and may have been dismissed as "growing pains." It is estimated that almost 2% of the school children in this country have rheumatic fever. The disease can be treated, but needs to be identified as early as possible in order to avoid serious cardiac (heart) damage.



Other than clues provided by the questionnaire/interview, rheumatic fever or congenital heart disease may be suspected as the result of heart sounds and murmurs listened for by an instrument known as a phonocardiograph. The sounds are caused by normal vibrations in the circulatory system, and the significance of any irregular sounds (murmurs) must be determined by a physician. Parents should not become

immediately apprehensive, because children as often as not will grow out of heart murmurs. But physician supervision is important.

Hypertension (high blood pressure) is usually associated with older people. However, it does occur in children, and will always require referral to a physician.

Some typical questions (and some branching ones):

- a. Has your child ever:
 - had chest pains? (When? After exercise?)
 - been troubled by a thumping or racing heart? (When? After exercise?)
 - become short of breath while walking or climbing stairs?



- had to squat or hunch down while playing?
- been bothered by frequent leg cramps?
- had to be propped up in bed in order to breathe comfortably?

- seemed to get hot flashes?
- gotten blue lips, or fainted frequently?
- b. Has anyone ever said your child has a heart murmur?
- c. Does your family have a history of heart disease or hypertension?

10. NEUROLOGICAL AND MUSCULOSKELETAL

The term "neurological" refers to our nervous system, which consists primarily of the brain, spinal cord and nerves.

The brain, with its 10 billion cells, runs things, regulating our:
-conscious acts (walking, talking, writing)

-involuntary acts (breathing, coughing, swallowing, blinking)
-emotions (love, anger, jealousy)

Three basic parts make up the brain: the cerebrum, cerebellum and medulla oblongata.

The <u>Cerebrum</u> is the largest part of the brain and occupies the entire upper portion of the cranium (skull). Its functions are to absorb information through the senses (seeing, hearing, touching, and so on), reasoning, and directing voluntary actions. If you see a problem, figure it out, write down the answer or tell someone about it, the part of your brain you are using is your cerebrum.

The <u>cerebellum</u> tucks in below and behind the cerebrum at the back of the skull. In appearance it resembles a ball of knitting yarn, and its functions are to co-ordinate our muscles and regulate our balance.

The medulla oblongata is at the base of the brain, and connects it to the spinal cord. The medulla oblongata regulates our involuntary muscles that control our life-sustaining functions, like breathing and the beating of our heart.

The <u>spinal cord</u> carries nerve impulses—tiny electric signals—from our brain to our trunk and limbs and back again to the brain. The spinal cord is about half an inch thick, and is strung along the inside of the bony spinal column.

Nerves spread from the spinal cord to all parts of the body. There are two kinds of nerves:

- Sensory nerves, which carry the messages from our trunk and limbs to the spinal cord and up to the brain;
- Motor nerves, which carry messages from the brain back down the spinal column to the trunk and limbs.

Impulses (messages) in our largest nerves travel about 200 miles per hour.

The nervous system requires oxygen to do its work—oxygen which is carried to it by the blood. The brain alone requires one-fifth of the oxygen we breathe in, and even a slight decrease in this oxygen will drastically affect how our brain functions. Fifteen seconds without oxygen will cause us to lose consciousness. Four minutes without oxygen may cause irreparable damage to the brain, and even death.

The term "musculoskeletal" refers to our muscles and bones. There are over 600 muscles in our body, of two basic types: skeletal and smooth.

Skeletal muscles are attached to the bones of the skeleton by tendons, which are strong bands of connective tissue. These muscles vary in size and strength. Skeletal muscles work in pairs—for example, one to bring a limb closer to the body, the other to straighten it out. By shortening and lengthening, these muscles move our limbs back and forth as our brain commands them.

Smooth muscles, however, work without our conscious commands. Examples of smooth muscles are those which line our stomach and intestines, and which by contracting slowly and rhythmically, pass food along our digestive tract. Smooth muscles also operate our lungs. They cannot be controlled voluntarily the way our skeletal muscles can.

Some muscles are strong, others weak, depending on their function and how much we use them. For growing children in particular, proper nutrition and exercise are necessary to make sure that each muscle will be able to do its assigned job.

Bones are structured on sound engineering principles, combining economy of weight with maximum strength. They consist of living tissue: hard, compact cells on the outside, and spongy, light and porous cells on the inside. There is a leading edge of growing cells (the "growth line") at the end of each bone, and they continue to grow until we reach about 18 years of age. Organic matter inside our bones feeds them and helps them grow. It comes from protein (which is in food like eggs, cereal and wine reach), and if we do not replenish this protein from the food we eat, our bones become so hard and brittle that the slightest pressure will cause them to snap. Inorganic matter—calcium mostly, which is especially plentiful in milk—gives bones their strength and hardness.

The EPSDT interview/questionnaire can only suggest some of the more obvious symptoms of neurological (nervous) disorders. Where the screening answers appear significant to the reviewing physician, a detailed family history and follow-up will be essential.

Some typical questions (and some branching ones):

a. Does your child show any loss of strength or co-ordination in the arms or legs? Does he or she show difficulty in controlling movements?

- b. Has your child ever:
 - had periods of disorientation or confusion?
 - fainted or had dizzy spells? blacked out?
 - had difficulty walking, balancing or handling objects?
- c. Does your child seem to twitch a lot? Has he or she had spells of passing out and jerking? convulsions?
- d. Has your child complained of headaches? (How often? Do you know if they were in front or back of the head?)
- e. Does your child sometimes make sudden, unexplained movements?

Questions relating specifically to the musculoskeletal (muscles and bones) system:

- a. Does your child often have persistent (continuing) aches, swelling, stiffness in the joints or muscles?
- b. Does your child seem to have growing pains? (How would you describe them?)
- c. Does your child appear to you to limp?
- d. Would you say your child is clumsy?
- e. Hes there been any change in the way your child walks, or in the way she or he makes use of the hands?
- f. Has your child had any sprains, dislocations or broken bones? (Which bones? Do they seem to happen easily? Do they heal promptly?)
- g. Does your child have any handicaps?

11. MOUTH, NOSE AND THROAT

Most of the symptoms we are looking for in questions about the nose and throat, such as a stuffed or runny nose, or hoarseness, are only significant if they are frequent or persistent conditions.

Some typical questions:

- a. During the last six months, has your child had:
 - a tendency to breathe through the mouth? mostly to breathe through the mouth?
 - a frequent running or stuffed-up nose?
 - a persistent hoarseness or sore throat?
 - his or her adenoids out?
- b. Does your child sniff or sneeze a lot?
- c. Is your child always clearing her or his throat?
- d. Does your child pick his or her nose, or "punch it up" a lot?
- e. Does your child seem to have swollen glands?
- f. Does your child have bad breath?

Questions about the mouth are discussed more fully in another Workbook, covering dental screening. Some typical questions appearing in the general questionnaire are:

- a. Are there any sores on your child's jaw, gums or tongue?
- b. Within the last six months, has your child developed any irritations around the gums or mouth?
- c. Does your child have bed teeth? special problems with the teeth?
- d. Does your child grind the teeth?
- e. Does your child droot too much?

12. EYES AND EAS

Screening for eye and ear disorders is revered in separate Workbooks on <u>Vision Assessment</u> and <u>Hearing Assessment</u>. Here, we include only some of the questions which may be asked in the general interview or questionmaire before the child goes through the specific screening tests.

Eyes:

- a. Has your child within the past alx months!
 - -developed frequent eye irritations?
 - had trouble seeing object either close-up or at a distance?
 - -shown a tendency for her or his eyes to cross? Do you think your child is cross-eyed?
- b. Is your child having a problem with water eyes?
- c. Are his or her eyes often itchy? Do hey urn?
- d. Have there been any discharges, like puss, from your child's eyas?
- e. Are there always circles under your child's eyes?
- f. Do you think your child has a vision problem?

Ears:

- a. Within the past six months, has your colle built
 - trouble hearing or understanding people's voices?
 - two or more ear infections?
- b. Does your child have a tendency to pull or tug at the ears?
- c. Does your child have difficulty talking? tend to stutter?
- d. Are your child's ears always stopped up?

e. Does your child often complain that his or her ears hurt? Do the ears drain a lot? Do they have a bad odor?

13. PSYCHO-SOCIAL

Health is a broad subject that can mean many things. A person may "feel good" while a variety of damaging things are going on within the body, building up slowly and quietly until they destroy the sense of "feeling good." This is one of the reasons for a screening program like EPSDT, to try and find out what is wrong even before the child or parent becomes aware of the problem. In the preceding sections of this workbook, we have grouped together these possible problems the way physicians do, by body system. Yet we all know that there are many problems outside this "physical" system.

The World Health Organization (WHO) defines health as "a state of complete physical, mental and social well-being, and not merely the absence of disease and infirmity." It is easier (or at least it seems easier) to ask questions and get answers about physical well-being than about mental or social well-being. However, physical problems do not stand alone, and the health worker must have some understanding of the ways in which mood, behavior and one's environment affect physical well-being.

The purpose in asking the kinds of questions included in this section is to identify emotional and behavioral problems (of the family as well as the child); but equally important is the creation of a background of family attitudes and behavior which will help in evaluating the child's health. Part of this attitude and behavior can be noted by the health worker as the child and parent go through the clinic. Is the parent attentive to the child's comfort and safety during the tests? Is the parent patient with the child? Does the child smile?

If we need to caution the health worker against drawing "medical" conclusions from interview questions or observation of "symptoms," it is even more important to caution against drawing conclusions about "mental" or emotional conditions. Psychosocial questions are often difficult to evaluate because we tend to put some of our own feelings into the question (and answer). It is much easier to ask if a child has been coughing than to ask if the child has been sleeping in a room with four other people. And the parent—and the child, if old emough—will certainly notice a "superior" or judgmental reaction by the health worker.

Some questions about mood and behavior:

- a. Has your child had difficulties with toilet training? wet during the day or night?
- b. Does your child seem to have special fears? frequent nightmares? bad dreams?
- c. Boes your child become shy in front of other people? Would you say that your child is a "loner?"
- d. Is the child overly clinging to parents or persons that he or she knows well?
- e. Would you describe your child as irritable? easily upset? high strung or nervous?
- f. Is jealousy a problem? Does your child seem to become unreasonably jealous?
- g. Does your child fight a lot? go into severe temper tantrums? begin to break things on purpose?
- h. Do you think your child is especially disobedient? Does she or he sometimes steal things? lie very often?
- i. At what age did your child first:

- walk alone?
- sit up alone?
- stand alone?
- say 20 identifiable words?
- j. Has your child shown any sign of a speech problem?
- k. Does your child appear to you to be lazy?
- 1. Does your child have trouble concentrating?
- m. Does your child often appear unhappy? cry excessively?
- n. Does your child try to hold her or his breath for long periods of time? Do you often have to spank?
- o. Are you having any particular trouble managing your child?
- p. Is your child generally happy and easy to care for?
- q. Does your child suck her or his thumb? bite the nails?

Some questions about school and home:

- a. Has your child been:
 - attending special classes or a special school of any kind?
 - having problems with school work?
 - receiving instruction at home?
 - getting along all right with teachers and friends?
- b. Does your child like school?
 - c. How many school days did your child miss last term?
 - d. Are there any serious problems in the family you want to mention?
 - e. Does your child have repeated conflicts with others in the household?
 - f. Is the child being raised by substitute parents?
 - g. Does the mother or guardian work?

- h. Would you like to have other children? Would you like help with family planning?
- Do you have arguments with the other parent about how to raise the child?
- 1. Are there complaints about the child's living quarters? about his bedroom set-up?
- k. Are there serious money and employment problems in the family?

14. DISCUSSION AND GUIDANCE

During the EPSDT interviewing or question-reviewing process, every parent will have questions pertaining to her or his child. If there are no such questions, then the health worker has not established a sufficient rapport or basis for communication with the parent. Many questions and topics will come up time and time again, and as mentioned earlier, the health worker should use these occasions to provide some guidance and health education for the parent.

The topics are summarized in the attached chart, with an approximate age grouping. (See pages 122-123.)

Miscellaneous questions

The following types of questions may also appear in EPSDT questionmaires, or may be useful to the health worker in special situations:

- a. Has your child ever:
 - shown a marked increase or decrease in appetite?
 - been unusually thirsty for long periods of time?
 - lost any weight?

mesten paint, clay, plaster or other unusual things?

- swallowed anything harmful?

- seemed frequently tired or listless?
- had persistent or frequent headaches?
- had any scrapes or wounds which healed very slowly?
- had any recurring fever? any problem with fever?
- had any serious accidents?
- b. Do you think your child is overly sensitive to heat and cold?
- c. Has your child seemed tired and run-down lately? pale or washed-out?
- d. Does your child have trouble going to sleep? often wake at night? sleep restlessly?
- e. Has your child had a PKU test (blood or urine)? any other special tests?

	-
	-
	4 1000 100 0
	TV0 - 0 - 1

1-2 months 3-4 months 5-7 months 8-9 months 10-12 months Sneezing Respiratory infec-Likelihood of res-Hiccups tions piratory infection Irregular breathing Strains with bowel When to start toilet movement training Ease and force of urination Vitamina Feeding Feeding Use of cup Normal drop in ap-Solid foods Finger foods petite: Night bottle Vitamina Thumbsucking Sleeping Night crying "Spoiling" Play Play Play Discipline Discipline Colic Startle reflex Accidenta Accidenta Accidents Accidents Safety Getting into things Immunizations Coping with frus- Fear of strangers Fear of strangers Independence vs. trations Separation anxiety Need for affection dependency Attitude of father Normal unpleasant Negativism Schedule to fit in behavior

with family

15-18 months	2 years	3 years	4 years	5-6 years
Temper tantrums	Immaturity	Discipline	Use of money	Allowances
Obedience	Doesn't share or take turns			
Reaction towards siblings	Need for peer companionship	Need for peer companionship		Readiness for school Span of attention
Speech development				*
Toilet training	Care of teeth	Dental care	Dental care	
	Behavioral con- cerns of the parent, such as:	Behavioral con- cerns of the parent	Behavioral con- cerns of the parent	Behavioral con- cerns of the parent
	bedwetting bad dreams restless sleep thumbsucking			

QUESTIONS FOR THE TRAINEE

- On what major sources of information does the EPSDT health profile depend?
- o Name some of the advantages of a printed questionnaire.
- o Why is a family record important?
- o In what form do gastrointestinal disorders most often occur?
- o. What is the function of the respiratory system?
- o Is acne related to hormone activity?
- o Can you define health?

PERMANENTE PEDIATRIC MULTIPHASIC MEDICAL HISTORY QUESTIONNAIRE

THIS FORM IS TO HELP YOUR DOCTOR GIVE YOU SETTER HEALTH CARE. IT IS COMPLETELY CON-

NAME

RECORD. PLEASE COMPLETE THIS FORM AS BEST YOU CAN. IF YOU HAVE DOUBTS ABOUT ANY OF THE BUSSTIONS, LEAVE THEM BLANK AND WE WILL ASSIST YOU ON THE DAY OF YOUR APPOINTMENT.	ood. NUJool ER
FOR YOUR CHILD TO HAVE A PEDIATRIC MULTIPHASIC, A FORM. BE SURE TO BRING IT WITH YOU AT THE TIME OF CHILD'S NAME	A PARENT OR LEGAL GUARDIAN MUST COMPLETE AND SIGN THIS YOUR APPOINTMENT.
I GIVE PERMISSION FOR MY CHILD TO HAVE THE TESTS II	NCLUDED IN THE PEDIATRIC MULTIPHASIC EXAMINATION.
Legat Guardian	gnature
YOUR CHILD'S ADDRESS	LD'S HEALTH
PHONE NUMBER	SEX OF CHILD: MALE FEMALE
FAMILY HISTORY 1. HOW MANY CHILDREN DO YOU HAVE? (Circle one) 1 2 3 4 5 6 7 8 9 or name	9. PLEASE CHECK IF ANY OF CHILD'S BLOOD RELATIVES EVER HAD ANY OF THESE CONDITIONS. The condition of the
2. WAS THIS CHILD YOUR? (Check one) FIRST SECOND THIRD POURTH OR LATER	MENTAL RETARDATION
3. HAS CHILD'S MOTHER HAD ANY MISCARRIAGES? YES NO A. IS THE CHILD ADDPTED? YES NO	MENTAL ILLNESS
S. LIST NAME, AGE AND SEX OF BROTHERS AND SISTERS. INDICATE IF FULL BROTHER OR SISTER. Full YES NO	SEEN EXTREMELY FAT
1. NAMEAGESEX []	BIRTH DEFORMITY 070 071 072 073 074
2. NAMEAGESEX []	WRITE IN ANY CONDITIONS NOT LISTED ABOVE THAT RUN IN YOUR
2. HAME AGESEX [] []	FAMILY:
4. NAMEAGESEX □	16, AT THE PRESENT TIME, WHO USUALLY CARES FOR YOUR CHILD
5. NAMEAGESEX []	DURING THE DAY OR AFTER SCHOOL? (Check one)
6. NAMEAGE_SEX	CHILD'S MOTHER C
4. HOW TALL IS CHILD'S MOTHER? PEET INCHES	SOME OTHER FAMILY MEMBER FRIEND FRIEND
7. HOW TALL IS CHILD'S FATHER?FEETHOHES	11. DOES YOUR FAMILY SPEAK A SECOND LANGUAGE AT HOME?
& HOW MANY PEOPLE LIVE AT HOME? (Circle one)	YES O NO O
1 2 3 4 5 6 7 or more	13. IS YOUR CHILD GENERALLY IN GOOD HEALTH?

30 -							
Check any of the follow	ing diseases	s that the c	hild has had:				
10 day or Red Me	easles	Mumps Mumps		Pn:	rumonia		
3 day or German	Measles	Chick	en Pox	Tul	berculosis		
Scarlet Fever		Rheum	atic Fever	Who	oping Cough		
Is the child's father i							
Is the child's mother i	n good heal	th?				es No	
Do the CHILD and BOTH p	arents live	together?				es No	
PLEASE ANSWER THE FOLLO	WING QUESTI	ONS ABOUT AL	L YOUR CHILDRE	N:			
Nam	e	Age Sex	State of Hea	lth	Lives at Hom (yes or no)	e?	
1st born							
3rd born							
4th born							
5th born_							
Has the child's mother							
Have any of your children							
Circle any of the follo parents, aunts, uncles	wing diseas or cousins	ses that the s have had:	child's parent	s, sister	's, brothers, gr	enu.	
Diabetes	Birth Defe	ects	Bleeders	A:	sthma		
Rheumatic Fever	Convulsion	ns	Anemia	Ha	lyfever		
Heart Disease	Mental Re	taration	Cancer	SI	kin allergies		
Other Diseases:							
Has your child grown t							
Is your child's appeti	te usually	good?				Yes No	2
Do you think the child	is (circle	one): Over	weight? Under	rweight?	Normal?		
Is the child allergic	to any food	s?				No Yes	8
Is your child allergic							
Has the child ever had	asthma or	wheezing?			• • • • • • • • • • • • • • • • • • • •	No Ye	S
Has the child had trou	ble with ha	y fever?				No Ye	S
Does the child tend to	have a stu	iffy nose or	"constant cold	"?		No Ye	S

TO BE FILLED OUT AT THE APPOINTMENT BY NURSE-PR				HEALTH TESTING ONER EXAMINATION *** [EXAM NOT DONE
L GENERAL & PSYCHOLOGIC GENERAL APPEARANCE ACTIVITY OR DEVELOPME	WORM.	181 A SN 182 A SN	100 TND	9. (Cont.) AXILLARY MAIR 227 A85 225 FRE2 OTHER ABNORMALITY 236 PACS	828 THD
2. HEAD	100 100 100	194 A SH	186 THO	LIVER NORM 222 ENL	822 THO
8. EYES FUNDI OR RED REPLEX PUPILS	106 MGRM MGRM MORM	100 ABN	157 TNO	SPLEEN MASS 250 ENL MASS 250 PRES OTHER ABNORMALITY 220 PRES	
CONJUNCTIVA LID MARGINS STRABISMUS OTHER ABNORMALITY	MORM MORM	101 AGN 102 AGN 103 PRES 100 PRES	194 THO	11. GENITALIA & SEXUAL DEVELOPMENT MALE TESTES PENIS 241 CIPC SCROTUM 121 ABN 222 UNO B MOTO ABN 243 ABN 244 ABN 245 ABN 246 ABN	245 UNO U
4. EARS TYMPANIC MEMBRANES OTHER ABNORMALITY	100 PH PH	100 A 00 200 p p Q 5	167 THD	PUBIC HAIR 247 ABS 248 PMES OTHER ABHORMALITY 248 PMES	248 ABM
S. NOSE EXUDATE TURBINATES OTHER ABNORMALITY	A SO	204 A DA 204 A DA	262 THO	FEMALS LABIAL ADMESION ABS CLITORAL SIZE MOPM MENSES STARTED (Not 282 ABN PUBIC MAIR	
TEETH PHARYNX OTHER ASNORMALITY	#0 gm #0 gm	200 A DM 200 A DM	107 THD	GREASTS 285 HMF 286 PUB PRES	290 A BN
7. NECK ADENOPATHY THYROID OTHER ABNORMALITY	\$12 NO Red 4.05	014 PPES 010 ABN 210 PRES	018 THD	1.4 3AH 281 NORW	288 THO
RHYTHM SIGNIFICANT MURNUR OTHER ABNORMALITY	017 MORM MORM ABS	210 AOM 220 PR ES	210 THD	FEMORAL PULSE SUSPECTED HIP OF FOOT PROB OTHER ABNORMALITY 105 ABN/ ABS 206 ABN/ ABS 207 PRES	298 THO
9. LUNGS AND CHEST	200 00000		284 TH 0		278 THO
encarn admos	pegan	16. COA	MENTS OR SP	15. NEUROLOGICAL SYSTEM 278 MOPM 277 ABN	272 THO
٠.					

M.P. I.A. - ----

ISUPERVISORY PEDIATRICIANI

R.N., P.H.P.

4. HAS YOUR CHILD EVER HAD	MEDICATIONS AND IMMUNIZATIONS
A BROKEN BONE YES NO	1. DID CHILD HAVE INITIAL BABY SERIES
BEEN KNOCKED OUT OR UNCONSCIOUS	OF 3 OPT SHOTS?
ANY OTHER SERIOUS INJURY	167 100 100
IF YES, WHAT?	2. DID CHILD HAVE INITIAL BABY SERIES OF 2 (or 3) ORAL POLIO?
REPEATED EAR INFECTIONS	OF 2 (er 3) ORAC POLIO?
PNEUMONIA	3. HAS CHILD HAD A DPT OR DT BOOSTER
ALLERGIC SKIN WASH	IN PAST 5 YEARS7
ALLERGIC REACTION TO FOOD	4. HAS CHILD HAD AN ORAL POLIO
STREP THROAT	BOOKTED IN BAST & VEADER
ROSEOLA ("BABY MEASLES")	160 107 184
ASTHMA	5. HAS CHILD HAD SMALLPOX VACCINATION
ALLERGIC REACTION TO MEDICINE	IN PAST 5 YEARS?
CONVULSION	6. HAS CHILD HAD A MEASLES VACCINATION
RED OR 10-DAY MEASLES	("REGULAR MEASLES")?
GERMAN OR 3-DAY MEASLES	. 162 163 164
OHICKEN POX	7. HAS CHILD HAD MUMPS VACCINE SHOT?
MUMPS	8. HAS CHILD HAD GERMAN MEASLES
SCARLET PEVER	(BUBELLA) VACOINE SHOT?
URIHARY TRACT INFECTION	100 100 179
CONVOCATIONS WITHOUT PEVER	9. HAS CHILD EVER HAD A POSITIVE
ASTHMA OR WHEEZING IN THE PAST YEAR 131 -	TUBERCULIN TEST?
S. NAS YOUR CHILD HAD ANY OF THESE OPERATIONS? YES NO	10. HAS CHILD HAD A TUBERCULIN TEST IN THE PAST YEAR?
TONSILLECTOMY	170 170 170
CIRCUMCISION	11. DOES YOUR CHILD TAKE FLUORIDES BY MOUTH (FOR TEETH) REGULARLY?
APPENDECTOMY:	BY MOUTH (FOR TEETH) REGULARLY?
HERNIA REPAIR	
ANY OTHERS	12. DOES YOUR CHILD TAKE VITAMINS
IF YES, WAT?	REGULARLY?
4. DOES YOUR CHILD HAVE FREQUENT YES NO COLDS, COUGHS, OR RUNNY NOSE?	13. DOES YOUR CHILD TAKE ANY OTHER MEDICINES REGULARLY?
	IF YES, WHAT?
7. MAS A DOCTOR EVER SAID YOUR CHILD IS ALLERGIC?	14. HAS YOUR OHILD EVER SEEN A DENTIST?
8. HAS YOUR CHILD EVER BEEN HOSPITALIZED	
FOR AN ILLMESS OR INJURY NOT ALREADY	15. HAS YOUR CHILD SEEN A DENTIST IN
MENTIONED?	THE PAST YEAR?
IF YES, WHAT?	16. DOES YOUR CHILD HAVE A DENTAL
	PROBLEM?
9. HAS YOUR CHILD EVER HAD ALLERGY	
TESTING?	
IDENTIFYING DATA	IDENTIFYING DATA (cont'd.)
1. CHILD'S FATHER'S PRESENT AGE?YEARS	5. MOTHER'S AGE?YEARSMONTHS
	- There were the same and the same and the
2. WHAT IS THE CHILD'S FATHER'S USUAL OCCUPATION?	6. DOES MOTHER HAVE AN OCCUPATION OTHER YES NO
	IF YES, WHAT?
	7. DOES YOUR CHILD HAVE A REGULAR DOCTOR?
3. WHAT IS YOUR CHILD'S FATHER'S RACE? (Check one)	YES NO
WHITE-CAUCASIAN 1200 BLACK-NEGRO 140	IF YES, WHO?
YELLOW-ORIENTAL I 144 OTHER I 144	8. PLEASE CHECK THE ONE BOX THAT BEST DESCRIBES MOTHER'S
	PRESENT STATUS.
IF OTHER, WHATP	MARRIED REMARRIED NEVER MARRIED
4. WHAT IS YOUR RACE? (MOTHER) (Check ere)	SEPARATED DIVORCED WIDOWED
WHITE-CAUCASIAN I 140 BLACK-NEGRO I 144	· ·
	9. THIS CHILD IS NOW LIVING WITH WHOM?
YELLON-ORIENTAL 100 OTHER 100	MOTHER FATHER OTHER
IF OTHER WHATT	IF OTHER, WHO?

RINATAL HISTORY OF CHILD'S MOTHER	8. DID YOU HAVE ANY OF THESE DIFFICULTIES WITH THE BABY'S
1. DID YOU HAVE ANY OF THESE ILLNESSES DURING YOUR	CESARIAN SECTION
PREGNANCY WITH THIS CHILD?	FORCEPS DELIVERY
MEASLES DURING FIRST 3 MONTHS	BORN FEET FIRST (BREECH) 95
OTHER INFECTIONS	9. DID YOU TAKE YOUR BABY HOME FROM THE HOSPITAL AT THE
IF YES, WHAT?	USUAL TIME? YES NO
BLEEDING DURING FIRST 3 MONTHS	11 /100 111 11011
BLEEDING DURING LAST 3 MONTHS	PLEASE CHECK THE ANSWER TO EACH OF THESE QUESTIONS BY
HIGH BLOOD PRESSURE	MARKING ONE DF THE 3 BOXES AFTER EACH QUESTION AND ANSWER ONLY THOSE QUESTIONS WHICH APPLY TO YOUR CHILD
. ALBUMIN OR PROTEIN IN URINE	AT HIS PRESENT AGE.
PUFFINESS OR SWOLLEN ANKLES	ASOVE AVER- BELOW
DIABETES OR SUGAR IN YOUR URINE	1. I FEEL THAT GENERALLY MY CHILD'S PHYSICAL DEVELOPMENT IS
IF YES, WHAT?	2. I FEEL THAT GENERALLY MY CHILD'S
ANY X-RAYS	. MENTAL DEVELOPMENT IS
. IF YES, FOR WHAT?	3. I FEEL THAT GENERALLY MY CHILD'S EMOTIONAL DEVELOPMENT IS
2. WHEN YOU WERE PREGNANT WITH THIS CHILD DID YOU	A I FEEL THAT THE AGE AT WHICH MY
TAKE ANY OF THESE MEDICINES?	CHILD FIRST SAT UP WAS
VITAMINS	5. I FEEL THAT THE AGE AT WHICH MY
IRON	CHILD FIRST WALKED WAS
ASPIRIN	6. I FEEL THAT THE AGE AT WHICH MY CHILD FIRST TALKED WAS
MEDICINE FOR NAUSEA OR YOMITING RELIEF	7. I FEEL THAT MY CHILD'S LARGE MUSCLE COORDINATION
MEDICINE FOR HIGH BLOOD PRESSURE	
MEDICINES FOR INFECTIONS	ETC) IS
SLEEPING MEDICINE	8. I FEEL THAT MY CHILD'S SMALL MUSCLE COORDINATION
ANY OTHERS	(WRITING, USING SCISSORS.
IP TES, WHATF	
3. DURING YOUR PREGNANCY WITH THIS CHILD YES HO	
BF YES, DID YOU SMOKE 2 PACKS A DAY	10. I FEEL THAT MY CHILD'S VISION IS
OR MORE?	11. I FEEL THAT MY CHILD'S GENERAL SCHOOL WORK IS
OR 1 TO 2 PACKS A DAY?	12. I FEEL THAT MY CHILD'S READING
	ABILITY IS
4. HOW MUCH DID YOUR CHILD WEIGH AT BIRTH?	13. I FEEL THAT MY CHILD'S ARITHMETIC ABILITY IS
POUNDS OUNCES 10	
S. DID YOUR CHILD HAVE ANY OF THESE PROBLEMS AT BIRTH?	14. I FEEL THAT MY CHILD'S ABILITY TO CONCENTRATE ON HIS WORK IS
PREMATURE	15. I FEEL THAT MY CHILD'S SPEAKING
JAUNDICE OR YELLOW COLOR	
DIFFICULTY WITH BREATHING DURING FIRST GO GO	16. I FEEL THAT MY CHILD'S ABILITY TO GET ALONG WITH OTHERS IS
ANEMIA (LOW BLOOD)	
INFECTION	HISTORY OF PAST ILLNESSES
RM FACTOR	
	1. DOES YOUR CHILD HAVE ANY HEALTH PROBLEMS NOW?
6. DID YOUR CHILD HAVE ANY OF THESE PROBLEMS AT BIRTH?	
POSTMATURE OR OVERDUE (Over 3 weeks)	IF YES, WHAT?
DIFFICULTY IN TAKING FIRST BREATH	2. HAS YOUR CHILD EVER HAD A SERIOUS ILLNESS?
ANY OTHER PROBLEM(S)	YES NO
. IP YES, WHAT?	
7. DID YOU HAVE ANY OF THESE DIFFICULTIES WITH THE	IF YES, WHAT?
BABY'S BIRTH? YES NO	3. HAS YOUR CHILD EVER SWALLOWED ANYTHING HARMFUL?
LABOR LONGER THAN 24 HOURS	YES NO C
SESSON LESS THAN 2 HOURS	IF YES, WHAT WAS SWALLOWED AND AT WHAT AGE?

	Date	
T.D.#		

PRESCHOOL HEALTH QUESTIONNAIRE TO BE COMPLETED BY THE CHILD'S PARENT OR GUARDIAN

Your answers to the following questions will assist us in obtaining an accurate and complete medical history for your child, and help direct our attention to your concerns when we discuss with you your child's health.

YOUR PRESCHOOL MEDICAL STAFF

Child	's Name				Birth Date	Sex	Race		
Paren Guard	t or ian	last	first	middle Address			Phone(or mess	200	phone
Which	doctor or c	linic has	been taking	care of you	r child?				
Appro	ximately whe	n was your	child's la	st routine	check-up?				
Which	doctor or c	linic will	take care	of your chi	ld in the futu	re?			
If se	en at	1	, what is	your child	's clinic numb	er?			
CIRCL	E THE CORREC	T ANSWER:	If uncerta	in, answer	with a questio	n mark.	EXAMPLE:	No	Yes
While	the Mother	was pregna	ent with thi	s child, di	d she have any	/ difficul	ties?	.No	Yes
Did s	he go to a p	hysician	or clinic re	gularly dur	ing her pregna	псу?		.Yes	No
das t	he baby born	within 2	weeks of th	e expected	time?			.Yes	No
How #	uch did the	baby weigi	at birth_						
Were	there any pr	oblems du	ring the lab	or or deliv	ery?			. No	Yes
Was t	here anythin	ig wrong w	ith your bab	y at birth?				, No	Yes
Did t	the baby have	any trou	ole in the n	ewborn nurs	ery?			.No	Yes
Did	our baby con	ne home fr	om the hospi	tal with th	e mother?			.Yes	No
Has 3	your child:								
	Ever been put	in a hos	pftal?					.No	Yes
. 1	ed his tons	lls taken	out?					.No	Yes
8	Ever had a se	evere head	injury or b	een knocked	out?			. No	Yes
	Broken any bo	nes?						.No	Yes
- 1	Ever been sei	riously bu	rned?					. No	Yes
1	Taken any med	icines or	poisons acc	identally?.				No	Yes
1	Had any other	r serious	illnesses, a	ccidents, c	r injuries?			No	Yes

Which hand does your child use to eat with (circ'	le) Right	Left	Both	
Which hand does your child use to draw with(circ	le) Right	: Left	Both	
Which hand does your child use to throw a ball (circle) Right	Left	Both	
Could your child dress himself by age four?			Yes	No
Could your child say understandable words (other	than Mama or Da	ada) by age	18 mos.?Yes	No
Could your child put words together in sentences	by 3 years?		Yes	No
Does your child understand what people say to him	?		Yes	No
Does the child like to be read to?			Yes	No
Does your child like to watch TV?			Yes	No
Do you think your child's play and thinking is as	good as most	children hi	is age?Yes	No
At this time, your child can do things as well as	ayear	old.		
Circle any of the following problems your child h	as had:			
Clumsiness Temper Tantrums Does				
List the dates on which your child received the f	ollowing immun	izations:		
Basic Series	Booste	_		
DPT (3-in-one)				
Polio by mouth				
Has your child had a shot for ten day measles?			Yes	No.
Has your child had a 3 day measles shot (German m	neasles or Rube	11a)	Yes	No
Has your child been exposed to anyone with tubero	ulosis (TB)?		No	Yes
Has the child been skin tested for TB?			Yes	No.
Was the skin test negative (no reaction)?			Yes	No
PLEASE READ AND SIGN THE FOLLOWING STATEMENT:				
I give my permission for medical examinations, laboral physicians, dentists, and other health persuand I authorize them and any other health pury child to share medical information when:	tory tests, and onnel of the pr rofessionals wh	treatment e-school h	ealth program,	

Page 3

Has the child had an ear i	nfection more than thr	ee times?	No Yes
Has the child ever had a d	raining or running ear	?	No Yes
Does your child hear well?			Yes No
Do the child's eyes ever o	ross?		Ho Yes
Does your child see well?-			NO TES
Is your child either weari			
Does your child:		and the same of th	163
Have trouble with his	teeth?		TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
		is heart?	
		val?	
Often wet the bed?			No Yes
		?	
		ldren?	
Which of the following have			
Won't mind	Trouble sleeping	Cries too much	Lying
Clumsiness	Nightmares	Fights too much	Stealing
Too active	Nailbiting	Clings to Mother	Starting Fires
Easily upset	Thumbsucking	Clings to Friends	Too Shy
Bad temper	Stuttering	Can't toilet train	Jealousy
High strung or nervous	Breathholding	Breaking things on purpose	Can't stick to one thing long enough
Has your child ever had a c	onvulsion, fit, or spe	11?	No Yes
old your child sit up by hi	mself at 9 months?		Yes No
Did the child walk by himse	If at 15 months?		Yes No
Is your child clumsy with h	is hands?		No Yes
id your child ride a tricy	cle by age 3?		Yes No
		Plane se en	to the loss are

REVIEW OF SYSTEMS (HEALTH PROBLEMS ASSOC'D WITH BODY PARTS OR FUNCTIONS)

The following questions have been arranged in a Health Questionnaire form, which can be filled out by the parent before, the interview, assisting the historian in obtaining a more complete history, and saves time by directing attention to problem areas.

CIRCLE THE CORRECT ANSWER (If uncertain, answer with a question mark)	
Has your child grown too slowly?no yes	
Is the child's appetite usually good?yes no	
Do you think your child is (circle one): Overweight? Underweight? Normal?	
Are you able to give your child the right kind of food to grow normally? yes no	
Is the child allergic to any foods?no yes	
Is your child allergic to any medicines?no yes	
Mas the child ever had asthma or wheezing?	
Mas the child had trouble with hay fever?no yes	
Does the child tend to have a stuffy nose or "constant cold"?no yes	
Mas the child had an ear infection more than three times?no yes	
Has the child ever had a draining or runny ear?no yes	
Does your child hear well?yes no	
Do the child's eyes ever cross?	
Does the child see well?yes no	
Is your child either wearing or supposed to be wearing glasses?	
Does your child:	
Have trouble with his teeth?	
Have a heart murmur or anything wrong with his heart?	
Have a rupture or a hernia of the groin or naval?no yes	
Often wet the bed?no yes	
Have trouble with his feet or legs?no yes	
Have low blood or anemia?no yes	
Is your child usually happy?	
Does your child get along with other children?	
Does your child seem different from other children?no yes	

PAST MEDICAL HISTORY AND FAMILY MEDICAL HISTORY

PREGNANCY - COMPLICATIONS, AMOUNT OF PRENATAL CARE, AND DURATION OF PREGNANCY:

While the mother was pregnant with this child, did she have any difficulties?

Did she go to a physician of clinic during during her pregnancy?

Did the pregnancy last the usual nine months? (or, did the baby come on time?)

What was your your baby's weight at birth?

PERINATAL - COMPLICATIONS:

Was there any trouble at birth? (or, Was there anything wrong with your baby at birth?

Did your baby have any trouble in the newborn nursery?

Did your baby come home from the hospital with you?

ACCIDENTS, INJURIES, HOSPITALIZATIONS:

Has your child: Ever been put in a hospital?

Had his tonsils taken out?

Ever had a severe head injury or been knocked out?

Broken any bones?

Ever been seriously burned?

Taken any medicines or poisons accidentally?

Had any other serious accidents or injuries?

INFECTIOUS DISEASES:

Has your child ever had measles? (10-day measles, old fashioned or hard measles)

Has your child ever had rubella? (3-day measles, German or mild measles)

Has your child ever had chicken pox, mumps, whooping cough (pertussis), or puemonia?

FAMILY - MEMBERS IN HOME, NUMBER OF MOTHER'S PREG'S (gravity), LIVE BIRTHS (parity), and MISCARRIAGES (abortus)

Have the child"s parents, grandparents, aunts, uncles, brothers, sisters, or cousins had:

diabetes, rheumatic fever, heart disease, birth defects, convulsions, mental retardation, asthma, hay fever, skin allergies, bleeders, anemia, cancer, or TB7

WORKBOOK IV-B

IMMUNIZATION

Although the immunization status of children is monitored in physicians' offices, health department clinics and schools, many parents fail to have their children immunized at the earliest age feasible or to have them checked at regular intervals. It is therefore one of the EPSDT objectives to identify and immunize every child who has not already received the proper immunization.

There are seven diseases for which immunization is currently recommended for all children: <u>diphtheria</u>, <u>tetanus</u>, <u>pertussis</u> (whooping cough), <u>poliomyelitis</u> ("polio"), <u>measles</u>, <u>rubella</u> (German measles) and <u>mumps</u>. Each of these may have serious consequences, so that it is important that every child be completely immunized.

The health worker can check the child's immunization status in several ways:

- Reviewing immunization records in the child's medical chart (if one is available), or records kept by the parents.
- 2. Interviewing the parent. Verbal reports, of course, are less valid than a written record, and the following guidelines may be helpful:
 - a. If the parent specifically recalls that at least three "baby shots" were given in the first six to nine months, the health worker can assume that the DTP shots were given.
 - b. If a parent remembers that an oral polio vaccine was given, the health worker can assume the statement is correct.
 - c. The parent's recall of a "messles" shot may indicate that the child was immunized either for messles or for rubella (German messles). Unless the parent is certain which one

was given, both must be repeated.

d. When information about past immunization is very unclear or uncertain, those in question should be repeated.



If the health worker relies on the parent's verbal report, that information about the type and time of immunization should be recorded
and given to the parent for future use, together with a schedule for
completing any immunization still required. When an immunization is
actually given, the purpose and type should be explained to the parent,
and a written record of the immunization should also be provided.

The person administering the immunization should be completely familiar with the proper-technique of intra-muscular injections, and with the contraindications (possible reactions) to each of the vaccines.



A health worker other than a physician or nurse can check the immunization status, prepare the proper vaccines, and administer the injection (except in some states where the administration of intramuscular vaccines is restricted to physicians and registered nurses).

Basic Immunization

Basic immunization (DPT: Diphtheria, Pertussis, Tetanus) generally consists of two or three primary injections, depending on the age of the child (and the type of injectible used in your clinic), and a reinforcing injection about seven to twelve months later. This reinforcement dose is an essential part of basic immunization, and

is not to be confused with a booster dose; each is separately scheduled.



The schedules for immunization suggested below are quite flexible, and the basic immunization series should never be repeated just because a scheduled injection was missed or delayed. Complete reimmunization is never required once the primary immunization is accomplished; it is never necessary to repeat a whole immunization series.

Routine immunization of infants is usually started at two or three months of age for diphtheria, tetanus, pertussis (whooping cough) and polio; and not until twelve months do we normally immunize for rubella and mumps. The chart below provides a check list for immunization status. If the child has had each of the immunizations

listed for her or his age group, immunization may be complete.



SUGGESTED CHECK-LIST FOR "COMPLETE" IMMUNIZATION STATUS

		Immunization			Received			Age Group							
					•				2-4 mos	4-6 mos	6-11 mos	12-17 mos	18 mos- 5 yrs	6-13 yrs	14-21 yrs
DTP	#1 .						٠		[]	53	50	58	6d	[c] #	[x] *
	TOPV	#1								\mathbb{H}	[c]	6.3	6c]	63	[k]
DTP	#2 .									[]	[c]	5d	6-3	[x]*	[x]*
	TOPV	#2									63	[c]	6d	[x]	Ed
DTP	#3 .					۰					[]	63			
	TOPV	#3									[]	H			
	M	easl	es									[]	Ex.	60	63
	R	ubel	la (G	erman	1 III 6	easles	3)	, .	۰			[]	[sc]	63	60
	M	ump s							٠			[]	[k]	63	60
DTP	#3 01	r #4	(aft	er ag	ge I	18 mos	3)						[]		
	TOPV	#3	or #4	(aft	er	age 1	18	mos)					[]		
DTP	or To	1 #3	, #4	or #	5 (a	after	ag	e 4)	,					[]	
	TOPV	#3,	#4 0	r #5	(ai	fter a	ige	4)						[]	68
Td ·	withi	n th	e las	t 10	yea	ars									[]

NOTE: DTP = Diphtheria and tetanus toxoids combined with pertussis

Td = Combined tetanus and diphtheria toxoid--adult type
TOPV= Trivalent oral polio vactine

- [] = Do at this age
- Do at this age if not previously done we schemule
- = Or Td (that is, Td can replace DTP after age 6)

Examples: A 14-year old child (last column) whose only diphtheria and tetanus immunization was a single DTP shot in infancy would require two doses of Td to be considered "completely" immunized. Similarly, a six-year old child who had received two doses of TOPV in infancy would require only one further dose to be considered "complete."

1. Routine immunization schedule begun in infancy:

age		vaccines
2 mos.	. 1	OTP, TOPV (no. 1)
4 mos.		DTP, TOPV (no. 2)
6 mos.	1	DTP, TOPV (no. 3)
12 mos.	1	Measles, rubella, mumps
1 1/2 y	rs. I	OTP, TOPV (no. 4; reinforcing doses)
4 to 6	yrs. I	DTP, TOPV (no. 5; boosters)
14 to 1	6 yrs.	Id (and continue every 10 years)

2. Schedule for children 1 through 5 years old, not immunized in infancy:

time interval	vaccines
First visit	DTP, TOPV (no. 1)
1 month later	Messles, rubella, mumps
2 months later	DTP, TOPV (no. 2)
4 months later	DTP, TOPV (no. 3)
6 to 12 months later	DTP, TOPV (no. 4; reinforcing
	doses)
At age 14 to 16 yrs.	Td (continue every 10 wears)

3. Schedule for children 6 years and older, not immunized in infancy:

time interval	vaccines
First visit	Td, TOPV
1 month later	Measles, rubella, mumps
2 months later	Td, TOPV
6 to 12 months later	Td, TOPV
At age 14 to 16 years	Td (continue every 10 years)

Generally, the immunization dosage recommended by the manufacturer and included in the package literature) will be followed by the clinic.

The program physician and nursing staff should make sure that all health workers are able to recognize indications that individual doses should be reduced or the immunization deferred. Such indications would include a history of allergy, an existing infection, or certain nervous conditions.



Most reactions to immunization will be mild. It is neither necessary nor desirable to immunize children over six years of age for pertussis (whooping cough), and the cautions to be observed with regard to rubella vaccination of older girls will be discussed. Smallpox immunization is not included in EFSDT programs, in part because this is no longer a major disease threat in the U.S., and in part because reactions may cause a problem.

Rubella

Rubella, commonly known as German Measles, and occasionally called "3-day measles," is an infectious (contaginus) disease caused by a virus, usually very mild, and unless a complication occurs, seldom needs treatment. Typically, the shald may have some swelling of the glands behind the ears or in the neck, followed by a face and body rash, and perhaps a low-grade fever. These symptoms may lost for about three days.

The importance of rubella—and our reason for discussing it here—
is the damaging effect it may have on the felus (unborn shild).
The first three months of pregnancy are the most dangerous, and rubella during this period can cause a wide variety of birth befects, including:

- Hearing loss, which may not be detected until the child reaches school age.
- Eye defects—glaucoma, clouding of the cornea, small size eyeball, cataracts and lesions of the retina.
- 3. Cardiovascular (circulatory system) defects.
- Abnormalities of the central nervous system (CNS), such as an abnormally small-sized head, mental retardation, cerebral palsy, or behavior disturbances.

In addition to these defects, other problems in the <u>mewborn thild</u> may be associated with rubella:

- Small size at birth (sometimes less than five pounds, despite a full-term pregnancy).
- Bleeding tendency which may show itself in infants as reddish or purplish spots scattered over the face and body.
- 3. Enlarged liver and spleen.
- Hepatitis (inflammation of the liver), which usually shows itself as jaundice.

- 5. Swollen lymph nodes.
- 6. Bone lesions (detectable only by X-ray).
- Low red blood count (anemia), and occasionally a low white blood count.
- 8. Pneumonia.
- Brain or spine diseases (such as encephalitis or meningitis)
 which may appear in convulsions or other symptoms.
- Injury to the heart muscles, with symptoms of heart failure and abnormal ECG (electrocardiogram) tracings.

Infants with rubella get the virus "in utero" (before birth), but it may remain for several months after the child is born, and then infect persons—such as health workers—who are in close contact with the baby. It is difficult to diagnose rubella without completing a blood test, because many mothers will be completely unaware that they caught rubella during pregnancy, and the symptoms in the infant are easy to confuse with other conditions.

The objective of rubella immunization is, of course, to protect the pregnant woman by erasing the disease from the whole population.

Until we can be assured that the disease is in fact no longer a threat, however, we must continue to advise and warn pregnant women of the hazard of their being in contact with babies who may be infected with it. Infants under one year old are not vaccinated because they may not develop immunity to the disease at that age. On the other hand, it is very important to vaccinate girls before they reach the age of puberty. After puberty, rubella vaccine should not be used unless:

- 1. blood tests show that she is susceptible to rubella, and
- it is certain that she is not pregnant and will not become pregnant for eight weeks following the vaccination.

With respect to the second condition, it is obviously important that the health worker clearly explain the disease to the girl being



vaccinated.

There should be no need to remind health workers that when there is any doubt about the use of vaccines, the program physicians should always be consulted.

QUESTIONS FOR THE TRAINEE

- o For what diseases is immunization present recommended?
- o Are there reactions to immumizations
- o What is the objective of the limit in ?
- o Where do infants get the rubella virus?
- o How can you check the immunization status of a child

WORKBOOK IV-C

DEVELOPMENTAL SCREENING

Developmental screening is a broad term referring to the identification of several different types of handicaps, including:

- o school learning problems
- o severe emotional problems
- o seizure disorders
- o mental retardation.

The number of children we would expect to find with developmental problems depends in part on how we define the term. One definition is that the child has not developed enough to cope with his or her environment. Or we may look at development a bit more narrowly and say that the child has serious school learning problems. There are also such descriptions as severely distrubed or psychotic or simply troubled. These problems call for different caring skills, and this, too, creates some confusion. A child with a seizure disorder should be under the care of a neurologist, a psychotic child under the care of a psychiatrist or clinical psychologist. Most emotional or learning problems come within the field of the psychologist, while mental retardation requires still another set of supportive skills.

Whatever our definition, we are likely to find more developmental disabilities than any other kind of disbility for which we screen. It is repeatedly said that there is no point in identifying problems through screening if we are not prepared to follow up with some sort of treatment. This has particular force in the case of developmental screening.

The nature of the handicap, of course, determines what we can or

should do about it. Although there is some relationship between these developmental problems, their causes may be quite different. For instance, a child whose development is delayed because of a thyroid deficiency will require medical treatment. But the child whose development is delayed because of environmental or cultural deprivation, needs support of a very different kind.

There is some relationship between developmental problems and:

- Age: more developmental delays appear as the child grows older and is expected to learn more.
- Family income: the lower the family income, the greater the possibility of school difficulties.

Perhaps the first problem to which every health worker must be sensitive is this one of definition or labeling. If we say that a child is mentally retarded, we put in motion attitudes on the part of parents and teachers which may make it impossible for that child to perform even at the level at which she or he is capable. If we say that the child is emotionally disturbed, this may be translated as anything from "crazy" to "incorrigible." By their very nature, "developmental" and "emotional" disturbances may be difficult to specify, and it is easy to understand why parents often over-react. In addition to the expected concern over "physical" ailments, many parents experience guilt or shame over "mental" disabilities.

The definition "failure to cope" is useful, at least insofar as it tells us that the family or the school is having a problem, but it does not tell us very much about the <a href="https://docs.not.ell.com/docs.

"medical" or "social," whether the focus of the problem is the child, another member of the family, or some outside circumstance.



We do know two things:

- Whatever the developmental problem, the <u>sooner</u> we identify it, the better. The nature of our development early in life forms the basis for successful later development.
- Where there is no specific treatment, the child's strengths and weaknesses need to be reviewed with the parents.

There are numerous methods used in developmental screening, and the choice for an EFSDT program will depend on:

o Which type of problem we are most anxious to identify (learning, emotional, neurological, retardation, etc.).

- o Which children we want to screen (everychild up to 6 years of age? groups likely to have developmental problems?)
- o The availability of adequate treatment resources.

Screening for developmental problems in infants and pre-school children will commonly use one of the following approaches:

a. Developmental Questionnaires

Often referred to as a "primary" screen, to be given to all children as they go through the EPSDT screening process.

Questionnaires frequently used are the "Developmental Screening Inventory" (DSI), and the "Rapid Developmental Screening Check List."

b. Developmental Screening Tests

These are more accurate than the questionnaires. Examples are the "Denver Developmental Screening Test," the "Developmental Screening Inventory," and the "Thorpe Developmental Inventory." Each of these testing methods may suggest a different frequency of screening. Some typical approaches are:

- (1) Use the developmental <u>test</u> as a follow-up "secondary screen" on any child indicating problems in the dewelopmental questionnaire.
- (2) Use the developmental test for every child at 9 months of age, at 3 to 5 years, at 8 and at 11 years of age.
- (3) For children at risk (meaning those who were premature or had a low birth weight, have a family history of developmental disorders, or who have seizure disorders), test every 6 months until the age of 3, then at 8 and 11 years.

Some developmental tests require intensified training (and periodic re-training) of staff. However, most developmental screening tests can be administered by paraprofessional health workers with only a little special training. The testing materials, questions and tasks for the child to perform are self-explanatory. The most important skills for the health worker are proper interviewing techniques (discussed elsewhere in this manual), an encouraging manner with children, and some knowledge of what to observe. This last skill requires more orientation and training by someone experienced in the field of developmental testing.

The health worker must also understand that child development does not occur "evenly," that there are periods of progress and periods of lag; and that small changes in the pace of development do not require referral to a specialist. On the other hand, where there are "border-line" findings, the child should be re-evaluated by a physician who can then help make the determination as to whether psychological or psychiatric referral is necessary.

In most EPSDT programs, developmental screening will focus on infants and pre-schoolers. Older children may be tested as part of their school program with such methods as the "Wide Range Achievement Test" (WRAT), and if those test results are available, they will make a useful addition to the child's health record. If not, the parent's report of the child's progress in school is generally sufficient.

Screening for severe emotional problems has been widely recommended, but a generally appropriate method for use with EPSDT has not been determined, and should be left to the decision of the local program managers.

A manual for developmental assessment and testing is being prepared for HEW by the Orthopsychiatric Society.

The following very brief description of the Denver Developmental Screening Test (DDST) will give some idea of the type of questions and observations used in this type of screening.

The Denver test is divided into four sectors: (1) Personal-Social, (2) Language, (3) Fine Motor and (4) Gross Motor. The contents of these sectors—which questions or tasks are to be used—varies with the age of the child.

(1) Personal-Social includes such observations as whether the child smiles, resists having a toy taken away, plays pat-a-cake or waves goodbye, rolls or tosses a ball back, copies household chores such as sweeping, dresses alone, and so on.



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(1) Personal-Social includes such observations as whether the child smiles, resists having a toy taken away, plays pat-a-cake or waves goodbye, rolls or tosses a ball back, copies household chores such as sweeping, dresses alone, and so on.



(2) The Language sector includes listening to baby sounds (cooing, laughing, squealing), saying "mama" or "dada," imitating sounds made by parent or health worker, naming parts of the body, combining words, recognizing pictures of familiar objects, defining certain words, finishing sentences such as "A horse is big, a mouse is ______," and the like.



(3) Fine Motor tests include whether a baby can follow an object with its eyes, can grasp a rattle, can pick up a raisin (an ability known as "pincer grip"), can stack blocks or balance them, can copy lines drawn by the health worker; in a general way, the test also explores the figures a child can draw.



(4) Cross Motor tests include the ability of a baby to lift her or his head or chest, stand or sit alone, walk with good sense of balance, walk in a straight line, catch a ball with the hands, hop on one foot, and so on.

Scoring on all such tests is related very closely to the exact age of the child. An example of a simple developmental form follows, on pages 149-151.



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SCREENING PROTOCOL

Name	Date	Examiner_	
•		Not at all	Poor O.K.
Copy: 1. Square 2. Cross 3. Triangle			
Name: 1. Baby 2. Clock 3. Fork			
Count: Fingers			
Name: Key			
Put finger on nose			
Show tongue			
Where is eyebrow?			
Point to elbow			
Put right hand on nose			
Put left hand on head			
Rapid alternating moveme	nts of hand		
Walk a line toe-to-heel:	1. Forward 2. Backward		
Нор		}	
Skip	•		
Catch ball or bean bag			
Repeat up to five number	s (note how many)		
Visual memory (show fou and remov which is	e one, then ask		

Screening Protocol Page 2 of 3

			Not	at	all	Poor	0.K.
		(alternatively: show three objects, cover, remove one, ask which is missing)					
Dexterity:		 Button shirt with two hands Button shirt with one hand 					
Show:		Right hand					
		Left ear Right eye					
Show b	ow y	ou: (indicate hand/foot used)					
	1.	Throw ball			- 1		
	2.	Hammer nail			1		
	3.	Cut with a knife					
	4.	Turn a door knob					
	5.	Use scissors					
	6.	Use eraser					
	7.	Kick ball					
		Step on a bug					
COMMEN	me.					1	

COMMENTS

Rate:	1.	Activity level	Low	Average	3 High
	2.	Distractability/attention span			
	3.	Motor co-ordination/clumsy			
	4.	Speech impediments or distortions			
		noted (yes or no)			
				1.	

The Incomplete Man (a Fine Motor test)

Ask the child: "What is it?"

Then say: "Yes, it's a man. He has only one leg. You finish the rest of him."

QUESTIONS FOR THE TRAINEE

- o What is developmental assessment?
- o Is there a relationship between developmental problems and age and family income? Explain.
- o What does "failure to cope" mean?
- o What is a "medical" problem?
- o What is a "social" problem?
- o Is there a validated method for screening emotional problems?

WORKBOOK IV-D

VISION SCREENING

Screening children for vision problems is an integral part of all EPSDT programs, not only because of the obvious importance of eyesight, but also because we want to detect vision difficulties which may interfere with the development and education of the child, and which may cause emotional or behavioral problems. Most important, of course, is that if vision defects can be discovered and treated early in life, more severe problems—and even blindness—may be avoided later on.

Unlike some of the other tests and procedures included in EPSDT,



there is not a single best way to do vision screening. The type of tests used will depend on the child's age and acceptance of the test, on the preference of the supervising physician, ophthalmologist or optometrist, and on the over-all design and staffing pattern of your particular EPSDT program.

Vision screening cannot substitute for the professional eye examination each child should have as an infant and at regular intervals thereafter. But the screening process can identify those children who need professional eye care and help bring them under treatment.



The key to a successful program rests with you as a multi-skilled, family-oriented health worker. Your effectiveness will depend in part on your technical and professional abilities, and in part on your skills as a health educator: a person who can translate information necessary to the child, to the parent, and to other health workers-doctor, nurse, social worker, technician, community representative, and so on.

Specific instructions will accompany the particular rational and equipment used in your EPSDT program, and training and visit a specialists will develop testing and monitoring processors and rational form. The purpose of this manual is to give you a maneral ackground of the problems, objectives and techniques of visits screens, to and it is you with the more common tests, and to the problems of the problems of the problems of the problems.

Basic Principles of Vision Screening

de have two types of vision: "straight ahead villo" and "soo in on."

Each type is important in its own way. Without trought villo we would be unable to read, do fine work, or see classed to a constitute vision, we would always be bumping and things and out-



The first vision we have, at birth or shortly afterwards, is side vision. This means that babies' vision is sensitive to mov-ment, and they can follow lights and moving objects long before they can make out details of their surroundings. The baby's eyes learn straight vision only by constant practice in looking at and concentrating on the finer features of familiar shapes and outlines.



Under normal circumstances, the baby's eyes learn straight vision automatically and equally in both eyes. Each eye receives to own impression or image, but the mind combines these two images into one. This is what gives us binocular vision: the perception of depth, or three dimensions. If something upsets the delicate balance and close co-operation between the two eyes, we get the very uncomfortable sensation of "seeing double." The natural reaction is that the mind will let one eye do all the work of seeing, and ignore the image being received by the other eye.

The most common reason for two eyes not co-operating is faulty alignment of the eyes—that is to say, one eye is turned inward or outward with respect to the other. Since the eyes are then looking in two different directions, the child can escape the annoyance of seeing double only by mentally shutting out the image from one eye, and unless treatment is started at once, that eye will never learn clear vision. This condition is not always easy to notice. Children who are obviously cross-eyed or "wall-eyed" should be brought under treatment right away; but this deviation, or "cast," may be very slight and difficult to detect. The good eye covers up for the faulty one by providing the necessary straight ahead vision, and the side vision of the poor eye keeps the child from bumping into things. The parent, teacher or health worker may then often assume, incorrectly, that both eyes are functioning well. This is the reason that it is essential



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one eye can focus more clearly than the other, and the mind shuts out the blurred vision of the weaker eye, which then becomes unused,

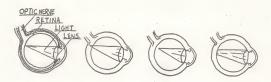
"lazy" or amblyopic. In many of these cases, a proper eyeglass prescription (no child is too young for glasses) will insure normal development of both eyes. But glasses are only half the answer. The "Izzy" eye must be forced to learn straight vision by placing a patch on the normal eye. If in your conversation with parents you

learn that they have a child for whom patching has been prescribed, you should ask if they are having trouble keeping the eye patched. The process is not a pleasant one for the child, and it is easy to understand how parents may avoid regular patching. You should emphasize the importance of the treatment while recognizing and being sympathetic to its difficulties.



We have described amblyopia as arising when the eye muscles are out of balance—a condition that may be visible to you as cross-eyes or squinting (and which eye specialist may refer to as strabismus or heterotropia). But amblyopia may be associated with other causes, or we may not be able to find out the cause at all.

Actually, the most common problem detected through vision screening is refractive error—the inability of the eye to focus correctly. The diagram at the top of the next page shows how rays of light are focused by the lens on the retina, which then sends the image to the brain through the optic nerve. Farsightedness occurs when the light rays focus behind the retina (a condition called hyperopia); near-sightedness occurs when they focus in front of the retina (the condition called myopia). When the light rays fail to focus sharply on the retina, we find the condition known as astigmatism. All of these refractive errors can generally be corrected through the use of eye-glasses.



Although not really a health problem, "color blindness" is related to the child's safety—for example, in obeying traffic lights—and both the child and the family should therefore be aware of this limitation as early as possible. It does not occur too frequently, but is more likely to be found among boys than girls, and among white than black children.

General inspection of the eye is, of course, part of all vision screening. Common sense will alert us to obvious infections or abnormalities, and to such conditions as excessive blinking, squinting or teariness. Some abnormalities may be inherited, others may be due to prenatal infection or to injury. Some may require immediate professional attention, while others will suggest the need for referral.

Eye Care Education for Parent and Child

To the extent that we all learn to recognize health problems, we are all "screeners"—of ourselves or our families. The purpose of a formal screening program such as EPSDT is to add the <u>trained observation</u> of a health testing team, but we must always keep in mind that "natural" screening and referral process in everybody, and reinforce it whenever and wherever we can.

The entire screening process—orientation of the child and parent to the program, the tests themselves, and any necessary referral and follow-up—must therefore continually include the process of learning, for the health worker as well as for the parent and child.

With vision screening, as with many other tests in the EPSDT program, all of us—whether professional or paraprofessional, parent or health worker—need to understand the special role of screening and how it differs from a professional eye-examination. Whenever there is any doubt about a child's vision, the parent should be encouraged to visit a clinic or physician or other professional help, regardless of how recently the child had a vision screening test.

We can make sure and not miss too many of these suspect conditions if the tests are done carefully, and with concern for each parent and



child. We will discuss later some of the clues to vision problems, but you will only recognize these clues if you are attentive to the family in front of you and sensitive to their attitude and expressions—spoken or unspoken. Many vision problems are not recognized by parents or teachers, nor by the child itself. A child with faulty vision may think that everyone sees things (or does not see things) the way she or he does, and therefore, has no reason to tell about a problem.

The parent's acceptance of your program will to a great extent reflect on how well you have been able to work with the child. All vision tests (except those used for babies) require the child's co-operation. This in turn will require your patience and imagination, and your skill in drawing out the parent's support. Above all, you must enjoy working with children.

At the beginning, the child may be uneasy or frightened because of the strange surroundings, or because the smells and uniforms in a clinic are unpleasantly associated with pain or discomfort. The child may become reassured as you talk with the parent; and remember that the child will interpret your manner, and the tone of your voice.



With very young children, you may often have difficulty holding their attention. The toys and pictures used in their tests are designed to be attractive, and sometimes they are so attractive that the child plays with them like a game, and does not want to follow the test procedure. For somewhat older children, the tests may depend on the child's ability to tell one direction from another, or to recognize certain forms or shapes or colors. And of course, the child must be able to tell you, either verbally or manually, what she or he perceives. Even in a rather simple direction test, difficulties may arise. Some right-handed children are unable to turn their right hand towards the right, but can turn it towards the left, and viceversa for left-handed children. You should be aware of this possibility, and when it occurs, try using a different test.

Most children can be reliably tested by age four, although you must remember that children will react in a variety of ways not only because of age or maturity, but because at the time you are testing them, they may be hungry, tired, bored, or otherwise distracted. Again,



you should never show any impatience. If the child cannot pass a particular screening test, you might try an alternate test if one is available, or else arrange for re-testing on another day.

You will often have to decide just how much time you should spend on a child having difficulty with a particular test. As we mentioned earlier, if you are not careful, or are impatient, or move too quickly, you may miss referring a child who is in need of further, professional examination. Or on the other hand, you may too quickly assume that a child cannot pass a particular test, and needlessly upset his or her parents by deciding on referral.

Over-referring ("finding too much") is not as serious as under-referring ("finding too little"), but either one or both can undermine a screening program. A parent will be relieved to find out that a suspected problem was not really significant; but after the first sense of relief, there will be irritation or anger at the screening staff for baving caused the worry to begin with. In answer to the question, "Why did I have to take

my child to the specialist when nothing was really wrong," the health worker must explain that screening units are designed to detect areas of weakness and to signal us of possible danger—a first step before diagnosis—and are not designed to replace the judgment of the eve specialist.



3. Vision Screening: Clinical History and Questionnaires

Vision screening in an EPSDT program should consist of at least three parts:

- <u>Education</u> of the family, and orientation of all of the screening staff, in eye care.
- b. History and questionnaire.
- c. Vision tests (see sec. 4 below)

It is the second item, the history, that concerns us in this section.

The physician or eye specialist who ends up with the responsibility for diagnosing and correcting or treating a vision problem, must rely upon bits of information from three sources:

- (1) His own observation of the child
- (2) The results of vision and other tests
- (3) A clinical history of the child and the child's family.

The person doing the screening has an important effect on all three of these information sources, and consequently has an important effect on the amount and quality of information reaching the specialist. It is for this reason, among others, that the health worker should be multiply-skilled and family-oriented.

In the hands of a skilled family health worker, the questionnaire is not only important in itself, but opens the door to a dialogue with the parent and the development of further information.

The history is part of the "patient profile" that the eye specialist will look at if the child needs to be referred. That specialist may very likely not have the time to take an in-depth history; she or he will depend on the patient profile and therefore on your skill in helping develop it.



Many questions relating to eye problems will be included in this general history-taking process, and the person who performs the vision tests should be able to reveiw that history, or at least part of it, and be aware of any clues it may provide. In other words, the family health worker must understand the significance of certain items in the general history which can help identify vision problems; that is why it would be best if the family health worker is multiply-skilled.

Perhaps half of the children who fail vision screening tests also have a family history of eye disease, or certain signs or symptoms which suggest eye problems. The kinds of information which can be obtained from the mother, or perhaps directly in the case of an older child, and which would suggest the possibility of a vision problem, include:

 a family history of vision defects such as color blindness or cataracts

- a family history of diabetes
- a history of German measles or of venereal disease during the mother's pregnancy
- a prolonged or difficult childbirth, or a very low weight at birth
- problems of the child immediately after birth-especially any difficulty in breathing which required long uses of oxygen
- signs of deafness, cerebral palsy, or mental retardation.

The health worker should also determine by looking at the child (and by asking, if the child is old enough), or by asking the parent, whether there are such problems as:

- frequent headaches, dizziness, blurred vision, sensitivity to light
- crossed eyes or eyes turned out; or rapid movements of the eyes
- red, swollen or encrusted eyelids
- watery eyes or discharges; haziness in the pupils.

Remember that a child thinks that everyone sees the way she or he does, and so may not complain at all about not seeing well, not realizing there is a vision problem.

Certain types of behavior may suggest vision problems, and although these problems may be identified by eye tests, the behavior clues may be available from the child, the parent, or from what the parent has heard the teacher say. These behavior-type problems might include:

- holding a book unusually close or far from the eyes while reading

- frequent blinking, squinting or rubbing the eyes
- unusual head tilting or turning
- poor alignment of letters when writing
- confusion in reading certain letters, such as between
 - o and a
 - e and c
 - b and h
 - n and r
- irritability when doing close work, or work property visual accuracy
- r lum mes to join games which require the mes wiston accuracy



- lack of attention to the blackboard, wall chart or map
- unusual choice of colors in doing art work.

Many of these conditions will be covered in the questionnaires. If they are not, the health worker nevertheless needs to be aware of them, ask questions about them, and report them if they seem significant.

4. Vision Screening Tests

(1) There are many parts of our vision that might be tested for a complete eye examination. In any screening program, however, we have to decide on a few tests that will give the most significant results: the tests that will detect the most important and communications vision problems found in children. None of the eye tests is cumpletely satisfactory, and there is not always agreement on what constitutes "normal" vision for pre-school children. You should remember that "testability" is not an absolute term; for example, a child may respond differently if tested at home, in a clinic, in a physician's office. or at school. Or a test may have been designed with only middle-inc. families or a single cultural group in mind. The important point that whatever tests are chosen for your EPSDT program, their miccase and reliability depend on the training and attitude of the boolth worker performing the test. Your understanding of the child's growth and development, your ability to work with young children and their parents, your skill in preparing the children for the test proceduresthese are what are most important.

The tests should be simple, so that they take as little time as possible. Small children tire quickly, are easily distracted, and will not pay attention for a very long time. Furthermore, most EPSDT programs want to serve as many children as possible in the course of a day.

We also wish to use tests that can be given by health workers after a reasonable amount of training and supervised practice, and which do not require the maintenance of complicated equipment.



(2) Whatever the tests chosen for your program, they can generally be categorized as follows:

BIRTH TO 2 OR 2 1/2

PRE-SCHOOL

SCHOOL AGE

General external examination

General inspection of the eyes for infection and visible abnormalities

Gross visual acuity

Central distance visual acuity (each eye)

Fixation test

(Directional tests)

Snellen E
Sjogren Hand
California Clown
Mich. Jr. Vision
(Shape recognition)
Matching letters (Stycar)
Pictures (Osterberg; Allen)

Toys/blocks/peg bench/games

Tests for non-straight eyes (muscle imbalance)

Pupillary light reflex (penlight) Cover test

Maddox Rod

Smellen chart

Accommodative ability
Test farsightedness
with a plus lens

Color Discrimination

Vision tests for infants are generally based on reflexes, and will most likely be done by a physician or nurse as part of their physical assessment of the baby. These tests are "gross"—for example, we know the baby is not blind if her or his pupil gets smaller when light is shined in the eyes.

It is around 2 1/2 to 3 years of age that we can first do subjective tests—that is, tests where the child communicates a thought. You may find, however, that half the children at this age are not testable. In fact, the most common pre-school vision test—the Snellen (Illiterate) E—often does not work before the age of four.

Three years old is generally considered the best time to screen for amblyopia.

Another controlling factor in the minimum age for vision screening is the need to use an <u>occluder</u>. An occluder is simply something to cover one eye while we test the other. (Remember how important it is to test each eye separately!) The occluder may be a pirate's patch, a one-eyed mask, a cardboard or plastic shield, or simply a card held over one eye. To avoid possible transfer of infection, a separate card or patch should be used for each child. Also, the card or patch should not put any pressure on the eye, and the child should keep the "patched," or covered, eye open. Showing the child how to use the occluder by wearing it or peeking through it yourself is a very good way to break the ice with a very young child and have him or her join you in doing the tests.

(3) Central distance visual acuity is the technical way of describing the ability of the child to make out signs or letters easily and at a normal distance. It is probably the single most important eye test for children because it will identify more children in need of eye care than any other test.



Visual acuity tests for older pre-schoolers (3 to 6 years) are generally based on the child's ability to distinguish directions. The most widely used of these tests are described below, and although there will certainly be variations from program to program, the principles involved are the same.

Good lighting is essential if these tests are to be at all accurate. This means that the letters, pictures or other materials shown to the child must be well-lift, but without a bright light or glare shining into the child's eyes. If the child squints when asked to look at the card or picture, this may be because of inadequate lighting—or because the child has learned to improve his vision by narrowing the eyes. In either case, the child should be asked not to squint, and the lighting should be checked.

The "E" Test

The only materials required for this test are an "E" card and some sort of occluder so that each eye can be tested separately. The card (or the instructions that come with it) will indicate the distance at which it is to be used. This might be 15 feet, but whatever the length, it is a good idea to cut a piece of string to that length so that the test will always be given at the proper distance. If, of course, the test is always given in the same room, you need only mark a spot for you to stand or sit the correct distance from where the child will be placed. Again, be sure that your position will be well—lit and without glare for the child, and that if the test materials include a hang-up chart, the wall is bare and without distractions, with the chart close to the child's eye level.



First, sit down with the child and explain that the two of you are going to play a "pointing game." Let's suppose you are working with a girl for the moment. Show her the big "E" card and ask her what it is.

If she can not describe it, tell her it is "the letter E," or "a hand with three fingers" or "a table with three legs." Whatever way

you want to describe it, point your fingers in the same direction as you rotate the "E," and then ask her to point her fingers or hold her hand "the same way as the E (or chair or table legs)." Continue until she can point in the four directions without help; praise her each time she responds (correctly or incorrectly).

If the child is unable to understand the test, do not become impatient or show either the parent or the child that you are disappointed. Use a picture card test (described later) instead. As with nearly all screening tests, the health worker must use careful judgment in the



amount of time to be spent with each child. The child and the parent must not feel rushed, and you must take the time you need to do the test accurately and with personal attention. On the other hand, you must work quickly enough so that the child does not tire and lose attention.

The next step is to show the child how to use the occluder, by holding it to your own eye and then placing it in her hand and showing her how to use it for each eye. (Particularly for smaller children, the parent or another health worker may be needed to hold the occluder in place). When you think the child is ready, go to your "testing position," show her the large "E" and ask her to point in the direction the "E" is pointing. If she answers correctly, you can then begin





the actual test. If she answers <u>incorrectly</u>, you should convince yourself that she still understands the test, and you can do this by moving back towards her and showing her the "E" in closer positions.

The actual test may be done using a small "E" on the reverse of the card, or an "E" line-chart, whichever your program calls for. If you are using the small "E", rotate it while covering it each time you turn it. Ask the child to point in the direction the "E" is pointing. Most procedures suggest that you do this until the child has three correct responses or three incorrect ones, whichever happens first. If you are using the line-chart, point to each one of the "E's," starting with the largest and moving down to the smallest

for which the child can show the direction. Record the line number of that smallest "E" on the form provided.

Whichever form of the test is used, be sure to test each eye separately, and make sure the child does not peak around the occluder.

Other Directional Tests

Most other directional tests are variations on the Snellen "E" described above. The Siggren Hand Test uses a picture of a hand with extended fingers (instead of the "E"), while the California Clown Test encourages the child to "do as I do" by copying the position of the rotating hand on the large, cut-out clown. These tests are probably more interesting to young children than a simple "E," but they have been no more accurate. The Landolt Broken Ring Test is also similar to the Snellen "E," and asks the child to show where each ring is broken. The Michigan Junior Vision Screening Test uses a chart with a moreable "E" in the center and four simple pictures around it. The "E" is turned so that it points to each of the four pictures, and the child then indicates the position of the "E" by identifying the picture to which it points.

Both the Snellen "E" and the Michigan tests also come in "home test" forms that can be distributed to the parents beforehand so that they can familiarize their children with the procedures before coming to the screening center. This has the added advantage of involving the parent in one phase of the testing process.

Matching Letter Tests

Children can match similar letters by pointing or some other method, even though they may be too young to draw them. This is the principle on which several tests have been devised, of which the Stycar Test from England is probably the best known. A five-letter group $(0,\,\nabla,\,\mathbb{X},\,\mathbb{T},\,\mathbb{H})$ is used for children as young as two years, with the letters A and U, and C and L added for older children. A somewhat simpler version of this kind of test uses symbols instead of letters—square, circle, triangle and so on.

Picture Tests

Of the various picture tests which rely on the child's ability to recognize familiar objects, the <u>Allen Picture Cards</u>, the <u>Osterberg Chart</u>, and the <u>American Optical Kindergarten Chart</u> are probably the most commonly used for children 2 1/2 to 3, and for older children who have difficulty with the "E" kind of tests. The pictures usually consist of familiar objects (man, horse, scissors, car, telephone and the like), and the child is considered able to perform the test if he or she can name four or more pictures in a set, at close range and without an occluder.

Let us suppose we are working with a boy this time. You should first review the pictures with him. If he names a picture incorrectly, that incorrect name can be used (don't correct him, but remember it) provided he uses it whenever he sees the picture. For example, if he calls an airplane a car and continues to call it a car on re-checking, you can use that card. If he does not name the picture, tell him what it is. Then show him the card again and see if he can name it without help. Do not use the pictures which he names differently each time or which seem to confuse him.

Next, show him how to use the occluder, and move to your testing position. Show him the pictures one at a time until he has named three of them correctly, or has given three wrong answers (whichever comes first). Then record the result in the form which is provided with the test.



Remember that this test, like all the others, must be given separately for each eye, and that the lighting on the picture cards must be good. In most cases, you can get good light with an ordinary goose-neck lamp with a metal shade, using a 75-watt bulb and placing it about five feet from the chart or where you are holding the cards.

Toy and Game Tests

Tests using miniature toys or games such as jig-saw puzzles or ballplaying have the advantage that they tell us something about the child's vision in a practical way, when he or she is doing the sort of thing that can go on any time during the week. These tests are also fun for children, are easy to give, and can be used with children who reject or have difficulty with other tests. But there are disadvantages, too. The results of these tests are hard to measure or "standardize," and they are not too accurate. This makes it difficult to decide which children should be "passed," re-tested, or referred. Also, children may become upset when they have to stop playing or have to give back the toys.

Some programs may use toy and game tests for other purposes: to learn something about the child's development or co-ordination. It is important to be aware of the vision aspect no matter what the main purpose of the test. Again, when a child has difficulty with a test, you must find out whether it is because:

- (1) the child has a vision problem
- (2) the test is inappropriate for some reason
- (3) the child is tired or distracted and should therefore be



be re-tested at a later time or date.

A final note on using toy or picture tests: be sure that they represent <u>objects familiar to the child you are testing</u>, so that she or he can readily identify them.

Fixation Test

This test is for younger children (see chart on page 171), but may also be useful if an older child cannot be tested properly with any of the other visual acuity tests we have described.

The principle behind the $\underline{Fixation\ Test}$ is simply to determine if each of the child's eyes will follow a moving penlight (small flashlight). The usual procedure is as follows:

- Hold the penlight close to your face--arm's length from the child--and cover one eye of the child with your free hand.
- Move the light from side to side, and see if the child's eye follows the light.
- 3. Then cover the other eye and repeat the procedure.

If the child does not follow the light, try to make sure that he or she has not simply lost interest in it. But there is another way in which this test will reveal faulty vision: if the child has one weak eye, he will usually object to the good eye being covered, and will try to push your hand away, or even start to cry. This will not happen if you cover the bad eye.

4. Tests for non-straight eyes (muscle imbalance)

Muscle balance tests may be difficult to administer because they require considerable co-operation from the child, and the "normal"

or "abnormal" results may not coincide with the results of other kinds of tests. Furthermore, muscle balance tests depend on what <u>you</u> see, not on what the child indicates he or she has seen, and this requires considerable practice in both giving the test and interpreting the results.

The most common muscle balance tests for pre-schoolers are the <u>cover</u> <u>tests</u> and the <u>Pupillary Light Reflex test</u> (also called the Corneal Light Reflex, Corneal Reflection, or Hirshberg test).

Cover Test

- Cover one of the child's eyes with your hand or thumb, but without touching the face or eye.
- Hold a penlight near your face, point it towards the child, and attract the child's attention to the light by moving it slightly.
- While the child is looking at the light, quickly move your hand or thumb to cover the other eye. See if the eye moves as it is being uncovered.

If the just-uncovered eye moved to see the flashlight, it is not straight. The principle used here is that if a person has truly straight eyes, both are aimed in the same direction, even when one is covered. But if a person has a tendency to have crossed eyes or eyes wandering out, the eye that is covered will turn in or out.

When the hand is switched over to the eye looking at the penlight, the eye just uncovered will be seen to swing from its turned-in or turned-out position in order to look at the light. For example: suppose someone has a right eye that turns in towards the nose. When this eye is covered with your hand, it is turned in. The left eye is looking at the penlight. When the hand is switched to cover the left

eye, the just-uncovered right eye will swing outward in order to see the light.

As mentioned above, practice is necessary to do this test correctly. The child must watch the penlight steadily for at least a short time, and the hand must be moved quickly and accurately to cover one eye and then the other, in order to see the eye move. By moving your hand back and forth in front of one eye and then the other, the test can be repeated several times. This is desirable in questionable cases. The penlight <u>must not</u> be moved while changing the hand cover from one eye to the other.*

In this test (as in the Fixation Test described earlier, if the child appears to lose interest in the flashlight, a spinning toy or sparkler can be used. And a cover test can also be done if the child can be directed to look at a small object across the room or outside the window instead of the flashlight.

Pupillary Light Reflex Test

When you point a flashlight at someone's eyes, you can see the light reflected in the pupil of each eye. These reflections should be in the <u>center</u> of each pupil unless the person has non-straight eyes, in which case one of the reflections will be off center.

In this test, you do not use an occluder (eye cover); you look at both eyes at the same time. To do the test:

 Hold the penlight up to your face and sit one or two feet from the child.

*From the "Denver Screening Tests" Manual. See Bibliography.

- Shine the light in the child's face so that you see where it is reflected in each pupil.
- The reflections should appear centered in the pupils or, if they appear slightly towards the nose, the amount should be equal in each eye.

QUESTIONS FOR THE TRAINEE

- o How does poor vision interfere with the education of a child?
- o What is straight vision? side vision?
- o Does color-blindness occur more often among boys than girls?
- o At what age can a child be more reliably eye tested?
- Why should children be screened when nothing is really wrong?
- o Can headaches be related to poor vision?

WORKBOOK IV-E

HEARING SCREENING

We all learn in many different ways, but for infants and young children, hearing may be the most important way. It is essential to learning, because without sound one cannot learn speech, and of course speech is what makes language possible, and language in turn makes for reading and writing.

A hearing difficulty can therefore hinder or delay mental growth, make it difficult to speak properly, and give the child a narrow and garbled perception of her or his environment.



Mild or moderate hearing losses may go undetected and result in the child's being mis-labeled a slow learner or mentally dull, and these labels can in turn lead to social and emotional problems.

The ear is divided into three parts: external, middle and internal.



- The external ear gathers sound vibrations like a funnel (it
 is also the part of the ear that secretes wax), and conveys
 those vibrations to the
- middle ear, which has a membrane like the top of a drum, and also contains the Eustachian tube which allows in air from the nose and mouth.
- The inner ear is a complicated part which contains fluid, and it is here that sound waves are turned into nerve messages that go to the brain.

One of the most common problems of the external ear is that it can be a catching place for insects, seeds, stones and other small objects. The health worker can often make suggestions to prevent ear injuries. For example:

- If an insect gets into the ear, drown or float it out with a few drops of baby oil. Sometimes, because insects are attracted to light, they can be encouraged to crawl out if a bright light is held near the ear.
- If water gets into the ear, remove it by dropping a small amount of alcohol into the ear and tilting the head to one, side.
- Ear swabs should be used with great care, and of course, sharp objects such as pencils or sticks hould be kept out of the ear.

The middle ear is where earaches typically occur. Otitis media is the inflammation of the middle ear; mastoiditis is the inflammation



of a part of the mastoid process. The principal cause of hearing loss in young children is ear infection which comes from a head cold, or from infected tonsils, adenoids or sinuses. The health worker should stress to the parent that earaches, or any ear injury or drainage from the ear, or temporary deafness, should receive immediate medical attention.

The purpose of auditory (hearing) screening is to identify as early as possible children whose hearing is reduced to the extent that it interferes with their actions and responses. More specifically, the aim of screening is to detect what are known as:

- central deafness
- 2. sensory neural hearing loss
- 3. conductive hearing impairment

early enough so that remedial efforts can be effective. If the hearing problem cannot be corrected, then the child must be provided special training to help learn new things and be able to communicate well.

The physical and developmental assessments in EPSDT programs will help identify hearing problems, and the questionmaire/interview process will give the health worker various clues to the child's hearing ability. From simply watching the child, the health worker may notice an indication of hearing loss that the parent (just because the child is around every day) has failed to notice. Most often, however, the clues will come from finding that the child:

- 1. has frequent ear infections
- cannot hear, or does not respond to, a quiet voice that you would expect the child to hear
- 3. responds to one parent's voice, but not the other's
- 4. regularly turns up the volume of TV or radio
- 5. has a family history of hearing problems.



Methods of Screening

- 1. Newborn Infants (to 6 months): As mentioned above the quellumniss/interview will act as a "first screen" or clue giver. The health worker should be especially attentive to a history of rubella or other infections, low birth weight, a cleft lip or palate, and defects in the ear, nose or throat. Such information in the history should at least make one suspicious that the child might have a hearing violet, and a note should be made to the audiologist or physician. If a hearing loss is then confirmed, a detailed history and physical examination will be necessary.
- 2. 6 months to 2 years: Again, clues may be found in the question-naire/interview process, and in some programs special noise makers may

be used to test hearing. But testing with an audiometer (described below) is only useful with infants and small children when done by a specialist.

- 3. 3 years and older: Children in this group may be routinely screened with an <u>audiometer</u>, an instrument which produces sounds of different pitch and loudness. Audiometric testing is limited in what it can tell us, and a child who "fails" the test must be checked by a specialist. All that "failing" really means is that the child:
 - (a) did not hear the test sounds or
 - (b) did not understand what he or she was supposed to or
 - (c) heard the sound, but did not respond because of illness, poor behavior, or some other problem.

Audiometry

The principle behind audiometry is simply that every person has a "threshold at which she or he begins to hear a particular sound. Of course, this threshold will vary depending on the "kind" of sound and how loud it is. Following are some terms used in audiometry:

- (a) Sound is a vibration heard by the ear. An audiometer produces sounds (or tones) of different frequency and intensity.
- (b) Frequency (pitch) is determined by how fast the sound vibrates. If a sound vibrates too slowly (or too quickly), we will not hear it. Fast vibrations have a high pitch or tone like a whistle. Slow sound vibrations have a low pitch and sound like a drum beat. Frequency has nothing to do with loudness. We measure distance in feet or yards; in a similar way, we measure frequency in Hertz, and abbreviate it Hz. For example, 500 Hz means 500 Hertz, 2000 Hz means 2000 Hertz.

(c) The loudness of a sound is referred to as Intensity, and is measured in <u>decibels</u>, abbreviated <u>dB</u>. A low intensity sound such as five decibels (5 dB) will be very quiet or soft. A medium intensity sound such as 50 dB can be heard very easily. And a 100 dB sound is very loud.

The audiometer enables us to produce tones of different frequency (Hz) and intensity (dB). The instrument may be a "plug-in" type or run by batteries. The child listens to the tones through a connecting set of earphones. There are different types of audiometer, and the manufacturer's instruction book will explain both how to use and how to calibrate (adjust) the instrument. If you know that you have normal hearing, you can do a rough calibration of the instrument by testing yourself.

The place where the testing is done is important. Even if the earphones have large muffs, the tests will be affected by outside noises.

If possible, audiometric screening should be done in a quiet room,
away from air-conditioning, water pipe, radio, street and waiting
room noise. Carpeting and drapes will reduce the level of these
"ambient" or background noises. Seating should be arranged so that
the child does not see the face of the audiometer, and also cannot
see your hands.

Whatever model instrument is used, the procedure will generally be as follows:

(a) Place the earphones on yourself to make sure that the equipment is working. An <u>output selector</u> is a switch used to direct the tone to the right or left earphone, and you should check each side at the different frequencies. The <u>frequency dial</u> will have different settings, but the ones used in screening will be: 500 Hz, 1000 Hz, 2000 Hz and 4000 Hz. Another knob, called a Hearing Level (HL), Threshold or Intensity Control, will enable you to set the loudness from 0 decibels

(0 dB) to 100 or 110 dB. At 0 dB, the tone coming from the sarphune should be very faint and difficult to hear; at 20 dB, the tone will be faint but easily heard if hearing is normal; and at 110 d3, the tone will be very loud and even uncomfortable. Firstly, at otter-rupter Switch will produce the tones when you rose it daws. In checking the equipment, set the hearing level at 30 d1 and the output elector to the "right" (usually marked in red) position. Dawn as the interrupter Switch at the four different frequencies mentioned above. The peac the process with the output selector to the loft (usually marked in blue).

(b) Let us assume you are testing a boy. Tell the parent you will give the child a hort hearing test to see it the arm's hearing is good. Then say and do something like the following.

WHAT YOU SAY

"We are going to play a listening game. In a few minutes, I'll let you wear the earphones like this."

"You will hear some little sounds like a beep or a whistle in the earphones. You will hear something like this."

"Did you hear that? Every time you hear the liftle whistle, put your hand up like this, and then put it down quickly. When you hear the sound I make, put your hand up. Let's practice doing that."

"Now listen to the whistle in the earphones. Put your hand up when you hear it, and then put your hand down quickly."

WHAT YOU DO

Put the earphon r on your all and point to them.

Give an example of the audiometer tone by "beeping" or whistling for the child.

Show how you wattr, some on be raised and lowers. Just and demonstrat the hor parties. Then see if the child on ray and by himsel, so 6 times as you whistle or beap.

Hold the ear hom 2 or 3 set from the chill. Turn the Intensity Selector (loudness) up high and press the Interrupter Switch so that the child can hear the tone.

^{*}From the "Denver Audiometric Screening Test"



"Listen carefully and put your hand up when you hear the little sound."

(If the child responds correctly:) "Good for you!" or nod your head and smile.

(If the child raises his hand when no sound is being presented:) "No, listen carefully."

"Now it's your turn to wear the earphones and listen for the sounds."

Again, press the Interrupter Switch to see if the child raises his hand (allow about one second for this). Repeat 5 or 6 times or until the child understands just what to do.

Place the earphones gently on the child (red earphone on the right ear, blue earphone on the left). Adjust the headband so that each earphone fits snugly against the ear. Make sure none of his heir covers his ears.

- (c) Actual testing procedure will be set by the consultant to your program. Following are some general comments:
 - You will probably be asked to test each ear at four different frequency-intensity settings, for example:

500 Hz at 30 dB

1000 Hz at 25 dB

2000 Hz at 25 dB

4000 Hz at 25 dB.

- (2) When you use the Interrupter Switch to deliver the tone, use the corner of your eye (your "side vision") to watch the child rather than looking at him directly. This will avoid his getting some hint of when you will press the switch.
- (3) After practicing with the child once or twice, produce the tone at irregular time intervals until he either responds to the beep three times or fails to respond three times, whichever comes first.
- (4) A score sheet will indicate that you are to report a PASS, FAIL or UNCERTAIN for each ear at each of the four settings. (Do all the right ear tests first, then the left ear tests.) The form of the scoring shett may look like this:

Frequency/Intensity Setting					Right Ear		Left		Ear	
500	Hz	(30	dB)	P	F	Ū	P	F	Ū	
1000	Hz	(25	dB)	P	F	U	P	F	U	
2000	Hz	(25		P	F	U	P	F	U	
4000	Hz	(25	dB)	P	F	U	P	F	П	

and you can put a circle around the appropriate "P," "F" or "U."

- P (Pass) = the child gave three correct responses, for both ears, at all four frequencies.
- F (Fail) = the child missed three responses (at any one frequency).

- U (Unmercain) you were not note if the 100 account or
- (5) If the result to fAID or INSELLATE, research in the control of the control of
- Off 20 the held prompt the Larges (eq. communication of his child, child, save the communication)
 - this shows that the could's not - -

 - to photology in Landon

 to provide the description of the provided the provided
- (7) If the child fails the indicates cost and a parameter that the 1918 do not make to be a control of the cost of the same to be a control of the cost of the parameter of the

OMESTAGNA FOR THE THATPER

- n Chr part Beach, Incert,
- o What are the three parts of the ear?
- o What is the principle behind audiometry?
- o What is sound?
- o Why is the place where the testing is done important?

WORKBOOK IV-

PERSIENT, CROWN AND DINTAL ASSESSMENT

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But the physical assessment portion of the EPSDT is not quite the same as the "physical examination" we would expect to see in the usual well-baby or well-child visit to the physician. To understand this difference, it is necessary to remind ourselves again of the distinction we want to make between screening and the traditional medical examination. We must continually remember and explain to the parents that screening programs do not detect every problem the child may have, or may later develop, and that the physical assessment in EPSDT is a "check-up" designed to find out if referral for a more complete examination is necessary.

There will be considerable variation from program to program in the nature of the staff doing the physical assessment, but it will include some combination of physician, pediatric nurse practitioner, physician assistant, or nurse with pediatric experience. The functions may be shared differently:

MD / MD / PNP / MD / PNP / PA / / PNP / PA /

The general rule in assigning screening staff is that we want each segment (question, test or observation) performed by the health worker with the level of skill appropriate to that segment. EPSDT emphasizes the division of labor between appropriate skills, and in most cases the division is clear. It is not appropriate for a clinic aide to make a clinical diagnosis, nor is it appropriate for a physician to record eligibility data. But in the physician to record eligibility data. But in the physician the most appropriate division of functions between physician, pediatric nurse practitioner and physician assistant is not always clear.

The advantages of using the PNP, PA or RN to perform the physical assessment include:

1. Economy. The physician's time is the most costly.

- Availability. A sufficient number of physicians may not be available for performing the physical assessment, and their time may have to be reserved for evaluating referrals and for professional supervision of the program.
- 3. Specialization. In terms of screening, the PNP, PA or RN can perform as specialists, concentrating their efforts and interest on the problems, techniques and objectives of EPSDT. The physician, on the other hand, has been trained very differently, and will concentrate his or her interests and energy on the diagnosis and treatment aspects of EPSDT, rather than on the preventive and maintenance spect, the health attitudes and practices within the family, and the ever-present social aspects of health care.
- The non-physician health workers can usually be scheduled to spend more time with the child and parent than can the physician.

The disadvantages in using the PNP, PA or RN to perform physical asseasments are:

- Suitable training may not be available, or may be too expensive and time-consuming.
- Since any positive findings (and some negative ones) must be reviewed by a physician anyway, the saving in physician time may be slight.
- During the physical assessment, the physician is abl., at the same time, to extend and interpret the information already provided by the other segments of EPSDT (the interviews, tests, and measurements).
- Some physicians may be reluctant to accept the assessment of non-physicians, and will tend to duplicate procedures already completed.



Whatever the staff combination used for the physical assessment, we can make that segment of EPSDT shorter and more effective by:

- 1. Making sure that the questionnaire/interview
 - a. contains significant comment by the health worker
 - b. is completed before the physical assessment, and is read by the physician or PNP beforehand.
 - Completing as many of the other segments as possible before the physical assessment.
 - 3. Preparing the child for the examination.

Thus, when all of the information (except that awaiting laboratory analysis) is obtained and recorded, the physician, PNP or PA can do

the physical assessment with the parent present, and simultaneously:

- 1. Discuss any questions or problems which may arise
- Plan with the child and parent for any further necessary evaluation or treatment.

The program may be so organized that the health worker who has been interviewing the parent and/or testing the child may join all or part of the physical assessment and reviewing session. And in any event, the health worker should be able to sit down with the parent when all the procedures have been completed, and review what has occurred.



One function of these review sessions is to explain to parents the significance of "positive" or "negative" findings.

Children with normal findings are unlikely to have any significant

disease that can be remedied. The children and their parents can therefore be reassured that the progress and health conditions to date are normal. They should be congratulated and encouraged to continue their successful health practices, and also reminded of the need for continuing health supervision, the prompt reporting of symptoms, participation in subsequent EPSDT programs, and so on.



Where there is a positive finding, it will be necessary again to explain to the parents that:

- In screening programs, there are many positive findings, most of which do not indicate significant health problems.
- Any positive finding has to be interpreted by the physician or other specialist as part of all of the other findings-positive and negative.
- 3. Some findings can be evaluated as part of the physical

assessment and review process; others must await further test results, referral to specialists, and so on.

The amount of time required for the physical assessment segment will depend on factors such as these:

- Who is doing the assessment: A physician may do certain things faster than a physician assistant, but the physician may insist on doing more things than screening, strictly speaking, requires.
- The general health status of the child. Obviously, the fewer positive or questionable results from tests and the questionmaire/interview, the faster the physical assessment.
- Language or other communications barriers between the child or parent, and the person performing the physical assessment.
- The completeness and accuracy of the interview and test data provided the physician, PNP or PA, by the other health workers.
- Availability of previous health records.

The physical assessment will be recorded by the physician, PNP or PA in categories of observation similar to those used in the questionnaire/interview. These categories include:

Head and face

Lungs and chest

Eyes, ears

Abdomen

Nose, mouth and throat

Genitalia Bones, joints, muscles

Teeth and gums Skin and hair

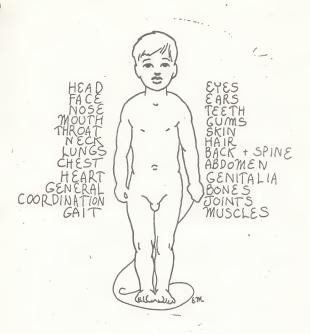
Back and spine

Neck

Co-ordination, gait

Heart General.

The periodic requirement of EPSDT means that each state or program will recommend frequencies of screening for different tests and for differently aged children.



In the case of infants, four visits may be recommended in the first six months (to coincide with immunization schedule requirements), but only three physical assessments may be necessary during that period if other tests and measurements are normal.

QUESTIONS FOR THE TRAINEE

- o Do you understand the difference between physical assessment and physical examination?
- o What are the advantages of using the FNP, PA or RN to perform the physical assessment?
- o What are the disadvantages of same?

family) history be carefully reviewed, and that there be a complete physical examination.

Growth measurements, whether or not "abnormal," are useful guides in evaluating the overall health of the child, and should therefore be recorded by the health worker before the physician or pediatric nurse begins the physical assessment. A child whose growth record is borderline or suspect should lead the health worker to pursue carefully those questions in the family history which bear on undernutrition. It should also be noted here that level of nutrition varies inversely with economic status—in other words, low-income children are generally smaller than children from more affluent families.

How measurements are taken

Three measuremen-s are necessary to complete the child's growth charts:
(1) <u>height</u> (stature), (2) <u>weight</u> and (3) <u>head circumference</u>.



(1) Up to two years of age, we generally measure the infant's length rather than <u>height</u>. This means that we measure the child lying down (recumbent) on a board marked off in inches, or we can use a tape measure. In either case, it is best to

name to different to the second

have two people (the parent and the health worker) do the measuring so that one can hold the child's head college where straightens the leg for accurate measurement. For other children, height can be measured by using a vertical consumption of the wall, or a fixed device such as a yardstick glued to the wall, or a fixed device such as those attached to clause scales.

- (2) Weight should always be measured with the child and are with minimal undergarments, and children should never be weight with their shoes on. Most clinics will have values (where sliding weights are moved along a measuring bar) and these should be checked for calibration (set at zero) before starting.
- (3) Head circumference should be measured with a metal of places tape measure (1/4" to 3/8" wide), rather than a class which might stretch. Because most of the growth of the half occurs during the first years of life, head circumference is usually measured until the child is two or three years old.

Since we need to compare measurements to determine rate of growing it is essential that all measuring be done in a careful and manner. All measurements are plotted on growth charts, which all possible to determine the growth "percentile rating," ad by consing tresent measurements with previous ones, which also note that the rate of the child's growth. These charts are svailable various companies, and tend to be about the same in design. (Some sample copies are attached.)

The proper way to take the necessary measurements can be learned quickly, but training should include at least a few hours of supervised practical experience, particularly in measuring infants.



Beyond this, there are requirements of the health worker that to nearly every other EPSDT function: liking children and to gain their co-operation, and the ability to convey to the particular procedure. The parent enough helped to understand that we all grow somewhat differently, and the variations in weight and stature are not something to be abraed in Growth assessment is also one of the screening procedures in this parent can co-operate. The health worker can ask the mother to get the baby in the scale, to read or corroborate the reasons health worker records on the chart. Ideally, the world to be abled to the mother is taking the measurements, assisted at the mother worker.

QUESTIONS FOR THE TRAINEE

- o What is growth assessment?
- o What is the relationship between growth an economic status?
- o Which three measurements are necessary to complete a child s growth chart?
- o When do you measure the child's length as opposed to not or her height?

III. DENTAL ASSESSMENT

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Background'

one of the important differences between medical and investigates as seen by a screening program is that while in medical are ning we seek to identify those children who have disease or the toms, in dental screening nearly every child will have a continue requiring attention. The early occurrence of dental is in the entire child population is further complicated by the continue of the entire child population is further complicated by the continue of the entire child population is further complicated by the continue of the entire child population is further complicated by the continue of critical importance if we are to the entire children of the entire child

*This section is drawn from materials in "A Guide to Dental Care EPSDT/ Medicaid," prepared for Social and Rehabilitation Service, DEEW, by the American Society of Dentistry for Children and the American Academy of Pedodontics. communities)—when the primary teeth have recently made their appearance in the mouth. By age 10, most children will have had dental caries, and some of them will have experienced diseases of the supporting tissues (peridontal disease).

In other words, although much can be done to prevent dental disease in children, it cannot be eliminated entirely, and it is therefore important that the child receive regular periodic dental care from early childhood through the teens. At present, largely because of financial barriers, probably only about 20% of the children in this country receive proper dental care.

We have pointed out that screening for medical problems identifies children who need more definitive diagnosis and possible treatment, but that this is not the purpose of dental screening where nearly all children will need some professional attention. The EPSDT dental program should therefore focus on:

- o Developing access for all eligible children to the dental care resources in the community
- Assisting with appointments, baby-sitting, and transportation so that access can be better assured
- Establishing a dental record as part of the EPSDT record showing treatment needed and received
- Urging children back to the dentist at appropriate intervals for re-evaluation and treatment of new defects
- Involving the family in this process of dental health maintenance, and providing dental health education.

The EPSDT worker will have an active role and responsibility in all of the above tasks.

Referral

Criteria for referral will have to be developed for each EFSDT program based upon the availability of dentists, their pattern of practice, and the existence of other dental programs in the schools or community.

From birth until three or four years old, most children will not need dental care because the teeth have just begun to appear (are newlerupted) in the mouth and have not yet had time to be attacked by dental disease. Exceptions, such as cleft palate, burns or injuries will be noted and referred by EPSDT physicians, nurses, or other health workers.

After infancy (the age will vary somewhat with local custom and the fluoride content of the water), criteria for referral can be based on information taken as part of the health history of the family, such as whether the child was seen by a dentist, and when

The almost universal need for dental treatment, combined with limitateatment resources, will require many EPSDT programs to set priorities for dental service. These might include:

- Emergency services such as those necessary to control pleasures;
 relieve pain, or eliminate acute infection.
- Preventive services such as instruction in self-care or al hygiene, cleaning of the teeth, or in some areas the application of caries (decay) preventives.
- Therapeutic (treatment) services for dental disease which, if left untreated, may become acute or cause irreversible damage to the teeth or supporting structures.

Other dental services should, of course, be provided as rapidly as the availability of resources permits.

Training

The role of the health worker as it relates to access, appointments, transportation, and so on, requires no training beyond that necessary for other aspects of the program. Some specific knowledge about how teeth grow and devleop, however, as well as of dental abnormalities that might be expected and self-help information that can be conveyed to the child and parent, must be included in the training agenda.

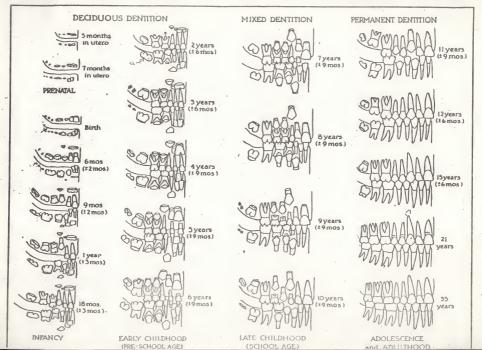
Local dental societies and health departments will generally provide training consultants and a variety of charts, slides, etc., describing the development of teeth and dental problems. (One example of these charts follows.)

Finally, the health worker should be acutely sware of the role of nutrition and eating habits in dental health. This is discussed in the workbook section on nutrition.

QUESTIONS FOR THE TRAINEE

- o When does dental decay start affecting children!
- o What is the purpose of dental screening?
- o How do you think nutrition and eating habits affect dental health?

DEVELOPMENT OF THE HUMAN DENTITION



WORKBOOK IV-G

TUBERCULOSIS

To most Americans, tuberculosis no longer appears as a major threat. It is seen as a conquered disease which modern medical science has cured. And to a large extent this is true. Mass X-ray screening programs and treatment with drugs have reduced or contained the disease. Yet we have not been able to do away with it entirely, and it is still much in evidence in certain areas and among certain people.

There is a difference between being <u>infected</u> by tuberculosis, being a <u>contact</u>, <u>having</u> the disease, or having <u>had</u> it but no longer having the active.

An infected child has the "tubercule bacilli" which at some future time may become active. If that occurs, the disease will become evident in a chest X-ray, or in certain changes in the bones, kidneys, or other body parts, or as signs and symptoms of an active illness. A contact is a person of any age who has been in close association with an active case of tuberculosis for a long enough time to become infected.



Because the national concern over tuberculosis has lessened—on the part of many health professionals as well as the public—there is some danger of our becoming too apathetic about cases when tuberculosis can appear. (Not too many years ago, we should remember, we thought that we had conquered VD!) We therefore need to consider several facts:

1. Continuing sources of infection

There is a large number of persons with active tuberculosis which has remained undiagnosed, and which is therefore an obvious threat of infection to others. There are also thousands of people who have had active tuberculosis in the past and who are therefore a "high risk" group which could develop the actual disease again, go unnoticed, and be a threat of infection to others.

2. Areas of concentration

Tuberculosis today tends to be concentrated in certain well-defined populations and places. There are clusters of the disease in Appalachia, on Indian reservations, in Mexican border counties, and perhaps most significantly, in the large urban ghettos. The incident of tuberculosis among non-whites is six times that of whites.

3. Changes in migratory patterns

A continuing reservoir of infection is provided by immigration into the United States of persons from high-tuberculosis areas. In this age of jet travel, a significant mobile population of young people moves around this country and abroad, often living closely together under unsanitary conditions and with inadequate medical care.

Tuberculin skin tests (described further on) provide a simple, low-cost and highly reliable means of screening large numbers of children through programs such as EPSDT.

Early identification of infected children (and prompt follow-up treatment) will prevent the disease from developing later in these children, and help lead us to persons with the disease who may be infecting others, aside from obviously revealing to us cases of active tuberculosis. In screening children for TB, priority might be given to high-risk groups such as:

- Children who have had prolonged and close contact with infectious cases of tuberculosis. This might mean a household, a classroom, or a particular work population.
- Children who are at risk of developing active tuberculosis because of other disease conditions, such as diabetes.

The first approach is criticized because, again, in this age of population mobility and school busing, high-risk groups are not isolated from contact with the larger population of children. On the other hand, screening all school children is probably too large an expenditure of effort and money for the number of cases that will be found.

The American Academy of Pediatrics has recommended that all infants between 9 and 12 months old be screened, before receiving their measles immunization. Re-testing might be considered when the child enters school, and perhaps again in the ninth or tenth grade if the community is one of high tuberculosis incidence. A still more frequent schedule might be recommended in such areas. Needless to say, every "contact" (a child who has had close association with a tubercular) should be tested immediately, regardless of age.

Screening Procedures

A. Tests: Children should be skin tested either with one of the <u>multiple puncture</u> (Tine, Monovac, Heaf or Sterneedle) tests, or with the <u>intradermal Mantoux</u> test. Each has some advantages and disadvantages.

<u>Multiple puncture tests</u>: These are simple to apply, since they only require pressing a "plug" against the child's arm. They require no special skill or equipment, and are less frightening to the child. Their disadvantages, however, are that results may vary with the way the health worker applies pressure to the plug, there are more false positive reactions than with other tests, results may be difficult to interpret, and verification is necessary through the Mantoux test.

Mantoux test: This test has the advantages of a measured dosage and therefore offers a more measurable and reliable result (fewer false positives and hence fewer over-referrals). The disadvantage is that the health worker has to:

- (a) remove a syringe from a package
- (b) place a needle on the syringe
- (c) draw tuberculin solution from a bottle
- (d) carefully inject 1/10 cc (cubic centimeter) into the skin of the arm (intradermal, or "between the skin").
- B. Interpreting the Results: Skin tests should be read two or three days afterwards. It is probably better to have the health worker do the reading, rather than the parents, who usually have to rely on a brief explanation and who sometimes forget. This, of course, means a return visit to the office or clinic, unless the program can be designed so that the skin test is given two or three days before the scheduled EPSDT visit.

The best way to learn to interpret skin test results is through the experience of watching someone else do it. The descriptions which follow are simply to familiarize you with the type of reaction.

Some terms:

Erythema: redness or red patches on the skin (superficial inflammation)

Induration: hardness in the skin Vesiculating: blistering



Tuberculin: A biological product used for skin testing. It is not a chemical or synthetic product, but is made from cultures of the tubercule bacilli (protein from the tuberculosis bacteria). All the skin tests use either Old Tuberculin (OT) or Purified Protein Derivative (PPD). Tuberculins are made by different companies, and are available in different strengths and for use in a variety of ways.

Interpreting the tests

Time Test: should be read after second or third day.

Negative: Nothing visible except perhaps a few small marks.

Positive: Some induration (hardness or raised firmness)

around one or more of the punctures. Reddish, rough and raised appearance.

Mono-Vacc Test: should be read on third or fourth day.

Negative: Nothing visible.

Positive: Erythema (redness) will be observed, but the only evidence of a positive reaction is induration, which you can feel even if it only measures one or two millimeters across.

<u>Heaf or Sterneedle Test</u>: can be read between the second and the seventh day.

Negative: Nothing visible except perhaps a few small marks.

Positive: Reactions are described by "grade:"

Grade 1. Induration of at least four of the puncture points, with erythema.

Grade 2. The induration points come together to form a ring.

Grade 3. Induration in the center of the ring, forming a coin pattern about one cm. (centimeter) in diameter.

Grade 4. Extensive induration.

Mantoux Test: should be read two to three days after it is
given.

The margin (edges) of the induration can be found by touch. Measure this induration or hardness in the skin by laying a flexible millimeter ruler across the point where the needle entered. Only one recording is necessary: the diameter of the indurated area, in millimeters. If there is erythema but no induration, record "0" millimeters. Use a good light in measuring the induration, and if possible have someone record for you as you measure.

Some general hints for interpreting results

- If there is erythems (redness) present, look for induration.
- Induration is usually visible and easy to feel. If the reactions are small and shapeless, you should compare readings with a more experienced person.
- Don't confuse surrounding edema (inflammation) with induration.
- In measuring induration, measure the diameter of the largest single reaction; do not add the diameters of other, smaller indurations.

Criteria for interpretation will be established by your program and may include such rules as:

Multiple puncture tests

Less than 2 mm. induration = negative reaction
2 mm. or more induration = doubtful reaction, to be confirmed by Mantoux test

(There is no need to re-test a negative reaction unless the child is a "contact" or there is clinical evidence suggestive of the disease.)

Mantoux test

10 mm (1 cm) or more induration = positive reaction, which indicates past or present infection.

5 mm through 9 mm induration = doubtful reaction, and should be repeated.

Less than 5 mm induration = negative reaction.

Some further notes:

 Nearly all persons infected with tuberculosis react to tuberculin tests, if the infection has not been within 6 or 8 weeks of the test.

- Stronger doses of tuberculin produce larger reactions.
- Some doubtful reactions may be "cross reaction"--caused by bacteria other than tuberculosis--and this is particularly true in multiple puncture tests.
- Reaction size in multiple puncture tests is not of much significance because, unlike the Mantoux, the dosage is not controlled.
- The tuberculin solution for Mantoux should be protected from light and stored in the refrigerator (not necessary for multiple puncture materials).
- If screening results are positive or doubtful, a diagnostic follow-up by a physician is absolutely necessary. The physician may then decide to place the child under preventive or curative treatment. (The child will then not be a source of infection to others, and need not be restricted from school or other activities). 95% of newly developed active cases can become non-infectious, recover and remain well, if they complete the chemotherapy (drug treatment) plan arranged by the physician.
- Among high incidence groups, the health worker doing the questionnaire/interview should pay particular attention to those questions and answers which will provide later information for "contact" follow-up.

QUESTIONS FOR THE TRAINEE

- o What is the difference between being infected by TB and having the disease?
- o Do all persons infected with tuberculosis react to tuberculin tests?
- o Early identification of infected children is very important. Why?
- o What are the advantages of the multiple puncture test?
- o What does "induration" mean?

WORKBOOK IV-H

SICKLE CELL TRAIT AND DISEASE

Sickle cell anemia is a disease which could be discussed in EPSDT programs with training materials under the title of Genetic Blood Disorders or Abnormal Hemoglobin Tests, or it could be included in the section on Anemia generally. However, because of some special problems, including the confusion between sickle cell trait and sickle cell disease, we will take a separate look at these conditions.

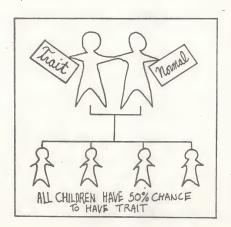
The emphasis placed by your EPSDT program on sickle cell will depend mostly on the population you serve. If that population includes a large percentage of black children, the entire EPSDT staff should have periodic training sessions on the psychological and social factors, as well as the clinical ones, which are involved. What we will try to do in the section immediately following is to summarize some readily available pamphlet material (see the Bibliography) and review those aspects of sickle cell that should be familiar to every health worker. It is important for both the worker and the parent to understand that inherited diseases exist among most racial groups: PKU among white infants, and rarely among either blacks or Central European Jews; Tay-Sachs disease mainly among Jews; disease of the fetus and newborn caused by the Rh blood factor, primarily in whites and rarely among blacks or certain Asian populations; and so on and on. This point requires emphasis because of the emotional aspect of any disease prevalent in a particular population.

Sickle cell anemia, therefore, is one of many hereditary blood diseases caused by abnormal hemoglobin in the red blood cells. Hemoglobin is the oxygen-carrying substance in red blood cells. Persons with sickle cell anemia have red cells that are crescent- or sickle-shaped rather than the usual round shape. But there are over 100

hemoglobin in their blood, but not enough to cause disability or require treatment except under special conditions (some persons may be affected by high altitude or conditions of stress).

3. Sickle cell variants: This occurs when someone has a sickle hemoglobin as well as another abnormal hemoglobin. Examples are sickle cell-hemoglobin C disease, or sickle cell-hemoglobin D disease, or sickle cell-thalassemia disease.

Approximately 8% of the black population (and a smaller proportion of certain other groups) have genetic traits which enable them to have children with one of the sickle cell diseases. Sickle cell anemia, the disease itself, probably affects between 25,000 and 50,000 persons in the U.S. And because the disease tends to shorten life span, it is found most commonly in young adults, children and infants (about 1



in every 500 newborn black infants has the disease).

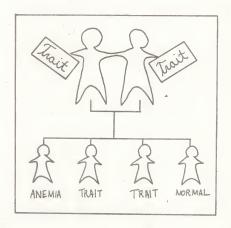
What is the hereditary pattern which transmits sickle cell trait and sickle cell disease (anemia)?

İf

One parent is a carrier (has the trait, and the other parent is normal--

Then

None of the children will have sickle cell disease (anemia). But the trait can be passed on: each child will have a 50-50 chance of inheriting the trait.

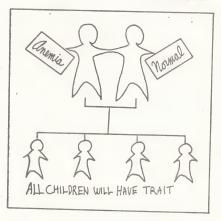


If

Both parents are carriers (have the trait but not the disease)—

Then

The chances are one in four that the child will have the disease, 2 in 4 that the child will only inherit the trait, and one in four that the child will have neither the trait nor the disease.



One parent has sickle cell anemia, and the other has neither the disease nor the traitAll the children will have the trait, but none will have the disease.

Sickle Cell Disease

Sickle cell disease does not appear before the first few months of life, and much more typically the symptoms do not occur until the child is between two and four years old. The symptoms are various. The infant or young child becomes pale, tires easily, eats poorly, and may complain of pains in the arms, legs, back and stomach. Frequently, an infection such as a cold or sore throat brings on or accompanies a "crisis"—a period when the symptoms become severe.

These crises may last a few hours or as long as a week or two and occur several times

sease are smaller and thinner than normal children their age. Intelligence is not affected.

In older children and adults, symptoms are much the same, although they seem to be generally milder than in younger children. Life expectancy may be shortened.

Screening tests

a year, but in the periods between crises, the patient may do quite well. As a rule, children with the di-

A blood test will show the presence of sickle hemoglobin, and also the amount, so that the trait can be distinguished from the disease. In cases of anemia, most or all of the hemoglobin is sickle hemoglobin.

There are two purposes in screening:

- To identify sickle cell <u>disease</u> so that we can try and prevent severe and life-threatening complications which may arise.
- To identify sickle cell trait so that the carriers of that trait can understand what limitations—if any—being a carrier may impose.

Screening for sickle cell disease should be done shortly after the child is born in order to be most effective. After age 1, nearly all children with the disease will begin to show symptoms and will have anemia. Screening for sickle cell disease will therefore usually be limited to babies, and to anemic children over the age of 1 who do not respond to iron treatment (see section on Anemia).



The question of who should be screened for sickle cell trait is a much more difficult one to answer. It is often said that young black persons of child-bearing age should be screened so that they themselves know whether or not they have the trait and can also know the odds of passing on sickle cell anemia to their children. If they find that they do have the trait, they will be spared a great deal of anxiety; if they have it and are aware of all the facts, they can decide intelligently about their own family planning.

The difficulty is that genetic counseling—advice about marriage and reproduction—is a very sensitive and private area of human behavior, and not too well understood. For the person with sickle cell trait, the reproductive choices available at present are limited to:

- 1. Avoiding marriage to persons who also have the trait.
- 2. Avoiding all pregnancies through birth control.
- Early termination of any unplanned pregnancy through legal abortion.
- 4. Initiating pregnancy through artificial insemination.
- Running a 25% risk of having a child affected by sickle cell disease.

Whether genetic counseling can influence these choices is not really known, so that there is some doubt as to whether screening for sickle cell trait will lower the occurrence of the disease. Furthermore, there is the risk that persons who are told they have the trait may worry unnecessarily, and upset their lives (or those of their children) with unnecessary restrictions on their activities; or by attributing symptoms of other illness to sickle cell trait, they may delay or avoid medical care for those illnesses.

Most EPSDT (and other screening) programs will therefore generally limit sickle cell testing to:



- 1. Infants and anemic small children.
- Persons older than 13 or 14 who voluntarily want to find out if they have the trait.

All people screened should have good information and counseling services available to them so that they can learn the reproductive alternatives which are available to them, and can understand that having the trait should not affect their life activities and health care.

Test Methods

The preferred test is called "hemoglobin electrophoresis"—a reliable and not very complicated laboratory procedure. No special precautions are necessary for the preservation of the blood sample to be forwarded to a central laboratory. Speed of the lab results is important in special sickle cell programs (they can be made available within a half hour if the lab is next door) so that counseling or reassurance can be given without requiring a follow-up visit. But where sickle cell testing is part of an EPSDT program, there is less need for immediate results.

Follow-up role of the EPSDT health worker

Sickle cell disease. When a newborn infant is found to have sickle cell disease, the nature of the disease must be explained to the parents by the physician and health worker, together with the reasons that continued health supervision is necessary. They must be alerted to the critical symptoms requiring immediate attention, such as fever weakness, or pallor.

Careful attention must be paid to the child's fluid balance during an



illness which involves vomiting or diarrhea, so that dehydration is avoided. This may prevent the painful crises which accompany the disease. Finally, the health worker must make certain that medical care will in fact be readily available and accessible when needed. This can be accomplished in part by co-ordinating EPSDT program efforts with agencies directly concerned with sickle cell disease.

<u>Sickle cell trait</u>. An adolescent or adult who is found to have sickle cell trait must be given two kinds of counseling:

- 1. There must be strong and convincing assurance that sickle cell trait is not any kind of disease, that life expectancy is the same as that of other people, and that possible ill effects from the trait (such as conditions where there is severe lack of oxygen) are very rare—and may, in fact, not be due to sickle cell trait at all. In other words, the only restriction on normal life activity might be a recommendation that persons with sickle cell trait not become test pilots or Alpine climbers!
- 2. There must be an explanation of the chances for producing offspring with sickle cell disease, and the chances that such an offspring will be able to lead a normal or restricted life. Printed information should, of course, be made available. Unless the health worker has been specially trained, the genetic counseling aspects of follow-up should probably be left to persons or organizations specializing in this activity. As already mentioned, genetic counseling is a very sensitive matter, and a hasty "summary" by the health worker may do more harm than good. On the other hand, if no follow-up explanation is attempted, the person screened may draw incorrect conclusions from the test results and may not seek further information or counseling.

A few remaining points for the health worker to bear in mind:

- There are people who "do not want to hear about sickle cell," and tests and information should not be imposed on them.
- Sickle cell disease may be associated with a wide variety of
 personal and public problems, and whether or not these associations are valid, they do involve considerations of personal
 sexuality, fear, shame, racism, and social and political movements.
- As with most disease, prevention is only effective if approached on a broad front. Sickle cell information in the schools and in the public media (when accurate) is essential to a successful program.

QUESTIONS FOR THE TRAINEE

- o What is the difference between sickle cell trait and sickle cell disease?
- o What is the hereditary pattern which transmits sickle cell trait and sickle cell anemia?

WORKBOOK IV-I

BACTERIURIA

Bacteriuria is a term referring to the passage of bacteria in the urine and indicating an infection of the urinary tract. The reason for including bacteriuria in a screening program is that a child may have a urinary tract infection without having any symptom ("asymptomatic"), and if this infection is not cleared up, permanent kidney (renal) damage may result. If urinary tract infections are recurrent, damage to the kidney becomes greater and is not reversible.

In some children, particularly when they are very young, urinary tract infections may be the result of congenital (birth) abnormalities of the urinary tract, and if these abnormalities are corrected early enough, the damage to the kidney is limited.

In many children, however, urinary tract infections even when recurrent are not the result of congenital abnormalities. Urinary tract infections occur in girls about 30 times as often as in boys. As a result, usually only girls are screened on a routine basis. If a boy has a urinary tract infection, it will generally be accompanied by symptoms bringing it to our attention.

An additional problem with girls who have urinary tract infections is that they may have a recurrence during pregnancy and some possible complications. Therefore, the early identification of asymptomatic bacteriuria in girls, accompanied by prompt treatment, may prevent a later recurrence, or at least alart the physician to the danger of a urinary tract infection when the girl becomes pregnant.

Screening is recommended as early as possible. This usually means three or four years of age, when the child can provide a urine specimen



on request. One re-screening is recommended. For example, a girl screened in kindergarten should be re-screened when she is in the first grade.

Method of screening

A child is considered "positive" (having a urinary tract infection) if she has a bacterial count of 100,000 colonies per milliliter (ml) of urina on three consecutive cultures. If she has symptoms of urinary tract infection, a 50,000 count is considered positive. There are several ways of testing the urine. The most common are

dip slide tests which utilize a slide having two culture media. The
slide is dipped into the urine specimen, drained of excess urine, and
then incubated overnight. The amount of growth on the two media makes
it possible accurately to estimate the number of bacteria colonies.
Some dip slide tests also give a color reaction (Griess Nitrite Test).
Time to permit incubation is essential, and if possible the test should
be performed with a first morning specimen. If the culture is positive, the test should be repeated twice more, since we have said that
three consecutive counts over 100,000 are necessary to indicate a
urinary tract infection. (If a girl has a positive reaction from the
Griess Nitrite test as well as a colony count of over 100,000, she is
considered positive without repeating the test.)

The bacterial count is affected by extraneous matter in the urine, and the manner in which the urine is collected is therefore important. The health worker should explain to the mother the reason why a first specimen in the morning is preferred (it is more concentrated and therefore more likely to show a positive count if there is an infection), and also explain the proper manner of washing the child with soap and water before collecting the specimen. Washing decreases the likelihood of contamination, and the program nurse may recommend bathing the girl the night before.

In order to provide the laboratory with the best possible (most readable) sample, urine specimens should be kept refrigerated, in the child's home and at the clinic, until the culture is taken.

If the child has significant bacteriuria (is "positive"), the physician to whom she is referred will probably recommend that another dip stick test be taken three or four days after the start of treatment.



If the test results are negative, the health worker should report to the parent as follows:

If the child has <u>no history</u> of urinary tract infection, the parent should be told that there is no present sign of infection, but that the child should be screened again in about a year.

If the child has a history of urinary tract infection, the parent should be told that there is no present sign of infection but that the girl should be re-screened on a periodic basis in order to discover any re-infection promptly. When there is such a history of infection, the re-testing should be done at least every three months for a year or two. Then if there is no recurrence of infection, re-screening should be annual, and then with the onset of sexual activity or pregnancy.



QUESTIONS FOR THE TRAINEE

- o Why is a urinary infection an additional problem with girls?
- o What is bacteriuria?
- What is the age recommended for testing bacteriuria in children?

WORKBOOK IV-J

LEAD POISONING

Lead poisoning, also called "plumbism," is a serious, sometimes fatal illness which is readily diagnosed and treated. Although completely preventable in most cases, lead posisoning continues to be a major problem in many American cities.

The consequences of lead poisoning in children include:

- abdominal disturbances
- interference with the development of red blood cells
- neuromuscular effects
- damage to the central nervous system
- impairment in learning
- mental retardation
- death.



The major source of lead poisoning in children is lead-based paint, ingested (eaten) over a period of several weeks or months. Other sources include putty, plaster, comic books and newsprint, certain pottery and cooking utensils, industrial fumes, dirt and dust, car exhaust, and even food and water. Exposure to these non-paint sources or carriers of lead are very unlikely in themselves to cause symptoms of poisoning, but their effect is to reduce the amount of lead a child can ingest before developing lead poisoning.

Where do we find lead-based paint?

Paint with a high content of lead was used a great deal in buildings painted before World War II; since that time, the lead content of interior paint has been limited. Old paint, both inside and outside, often in many layers, has begun to flake and chip, and is then swallowed by small children.

Two factors combine to make the children of poor families the target of lead poisoning:

- 1. Old, poorly maintained and deteriorating buildings with walls of flaking paint, are common in the inner city where so many poor families (largely Black and Latino) live. At least 10% of American children between 1 and 6 years old live in, visit, or obtain day care in buildings with loose or peeling paint.
- Most children between one and three years old will show signs of "oral explorations"—will try to put different things in



their mouths. But it is children in the lower socio-economic groups who are most subject to <u>pica--an</u> appetite disorder leading to the ingestion of non-food substances such as paint.

What is pica?

Most children with a high level of lead in their system also have a history of pica. It may be difficult, however, for the health worker to find evidence of pica: the parent may not have noticed this behavior in the child, or may not want to admit to its occurrence (many mothers of children with pica have the habit themselves).

Children with pica exhibit a habitual, purposeful and compulsive search for and eating of unnatural, non-food substances. Unfortunately, we do not know as much as we should about appetite disorders such as pica. The behavior has psychological and sociological roots, as well as physiological (body function) and nutritional associations. For

example, the relationship between a parent and child may lead to pica. The child may use pica to gain attention or to relieve anxiety brought on by a mother who is frequently absent or is unable to cope with family responsibilities.

The children for whom lead screening is most important, therefore, are those between the ages of one and six, who live in old buildings are parts of town where building codes are non-existent or not enforced. These children should be screened unless careful surveys have shown that lead poisoning is not a problem in the particular area or community.

Clearly, the only way to make significant reductions in lead exposure is to do something about sub-standard housing. Meanwhile, the immediate objectives of lead screening are to:

- Identify children who have absorbed an undue amount of lead from their environment.
- 2. Reduce their exposure to lead.
- Refer for medical treatment those children who have, or are about to have, serious ill effects from lead.

The problem of lead poisoning can be underlined by some statistics at a case history. The following estimates were published by HEW in 1971, and are probably about the same today:

Children in the susceptible age group (under 5 years old) 20 million

Children at risk (under 5, in poor families, living in metropolitan areas)

2 million

Deaths from lead poisoning (acute and long-term consequences

200/year

Potential lead cases per year

200,000 to 400,000

Symptomatic lead poisoning cases

10,000 to 20,000/yr

\$1500 to \$2500]

Encephalopathy (central nervous system) damage CASES 500 to 1000/yr Moderate to severe brain damage cases 200 to 400/yr Brain damage cases requiring lifetime care 100 to 200/vr Potential neurological (nervous system) handicaps 2000 to 4000/yr [Cost of hospital treatment for an uncomplicated case:

Case History: A two-year old and a three-year old child from the same family showed high levels of lead. The three-year old also showed clinical evidence of encephalopathy. Both children were severely ill for over a week. They were hospitalized for one month, treated five days a week for four weeks. They were then discharged. A survey of their home showed that paint layers on the window sill contained 50% lead. There were 14 members in the family, living in four rooms. It was not possible to relocate the family, and so the children had to be returned home. Three weeks later, the three-year old was re-admitted to the hospital with lead poisoning. The cost for the initial hospitalization and treatment of the two children was \$10,000; the effect of the lead poisoning on their brains is unknown.

As already mentioned, the "target" population for lead screening is children under five, living in dilapidated housing or other areas where lead poisoning cases have been identified from paint or other sources. How often should these children be screened? Again, the answer largely depends on where they live, but they should be checked at least yearly beginning on their first birthday and until they are three or four. If the tests are normal up to that time, it is unlikely that a child lives in an environment which is risky for lead poisoning. The frequency and age pattern for lead screening will be determined

by the physician responsible for the program, but the health worker who understands and is alert to the causes of lead poisoning can help identify the child who may be facing a lead problem (whether or not that child is within the program's "target group"). In some metropolitan areas, lead screening for infants may be recommended several times a year, particularly in summer when blood lead levels are higher.

Testing Methods

The most common methods are the <u>blood lead determinations</u> and the <u>FEP</u> (Free erythrocyte protoporphyrin) test. Either test requires specialized laboratory procedures, and each has its advantages and disadvantages. In collecting the blood sample to be sent to the laboratory, the health worker must be meticulous, since the sample will always be subject to contamination.



Follow-up of a "positive" test

Any child who (1) has repeated "positive" blood lead levels (typically, over 40 ug/ml) or who (2) has symptoms (or results from other tests)

suggesting lead absorbtion, should be immediately evaluated by a physician, and if necessary, referred for specialist evaluation and treatment. A decision will have to be made as to whether the child needs to be removed from her or his home for treatment. This will also mean a review of the home with the parents to locate possible sources of lead.

No child should be sent back home until the source of lead exposure has been either eliminated or made unavailable. This means working with the parents to see if any immediate steps can be taken by way of house repair or improvement. In some cases during repairs, it may be necessary for the child to stay with relatives or in other temporary settings.

Children discharged from treatment must also be followed up, at least until they are six years old, to make sure that they are not exposed again, and also to detect any symptoms of "abnormal" behavior, or brain or nervous malfunction, which might require special therapy. Also, all children under six who live or play at the address of the discharged child should be screened for blood lead.

For a lead control program to be really effective, however, the health worker must support and encourage the parents to join in neighborhood and community "task forces" which will mobilize lead control efforts. The major preventive tool for childhood lead poisoning is a new house or apartment free from lead paints. The health worker cannot provide this as a part of the EPSDT program, but the worker can do some of the following things:

- Advise the parents of existing agencies concerned with lead poisoning.
- In particular, advise the parent of tenant organizations and citizen groups concerned with housing codes and their enforcement. Unless there is rehabilitation of housing, lead screening

and treatment efforts are in large part wasted.

 Together with city housing and welfare officials, support the parent in pressing the landlord for necessary repairs and improvement.



- Organize whatever assistance is available to encourage and direct the parents in making immediate, obvious repairs that will reduce lead hazards.
- Make sure that the publicity that usually accompanies an EPSDT program includes information to the public about the lead problem and what can be done about it.
- 6. Speak to other agency workers (public health nurses, sanitarians, housing inspectors, social workers, physicians, nutritionists) about any indicators or special problems you have found with regard to lead exposure.
- 7. Discuss lead poisoning (and how to recognize such danger sources

as peeling paint) with the older children in the family, and with children who do baby-sitting in the neighborhood.



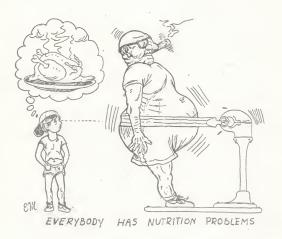
If the community is an industrial one where lead tumes or lead was are likely, the EPSDT program should join with the local head of ment and special agencies or consumer group transcribed with any pental safety, in assessing the potent all days of leading to any and the need for special screening or lagnosts.

As the community becomes more aware of lead poisoning, there will be an increase in the number of cases detected. Concern will prompt parents to bring children to screening programs, to watch for signs of pica. It is then that we will effectively reduce this unnecessary disabler and killer.

QUESTIONS FOR THE TRAINEE

- o What are the consequences of lead poisoning?
- o Where do we find lead-based paint?
- o What would be the most effective way of reducing lead exposure?
- o What could a community do about lead poisoning?

WORKBOOK IV-K



-258-

NUTRITION AND ANEMIA

1. NUTRITION

Nutrition concerns the quality of the food we eat and how the body uses that food; nutrition also concerns the food we do not eat, and how our body responds to this treatment. Good nutrition involves principles from many different sciences (biology, chemistry, medicine, sociology) and the co-ordination of many different skills (food preparation, food storage, income management). Good health is not possible without good nutrition, and trying to build health withough good nutrition is like supposing a house will stand without a foundation.



duttition touches on almost every aspect of travelles and aller care. Yet physicians and other health workers (waster and the to pure the subject aside and leve in a purpose educators" mess the natritional product in the late There are everal reasons for this the second being the nucley powers is usually a slow and _ fficult property and property the, feet a specificant of the case of the Lie second reason is that unrelied to the people of the good putrition is often a societe with an and a purer tite, we seed to know a great duar of our po to health and held on the field movels are never me porter the chili and family movers. Re and the chiling of the chiling votl's formula authorize on how her or pur easy the angeline class or morse is unable to spend that on a food question the may feel that the or he is not tot the second iterature. Some of this advice may be excellent from trogically base to mealth worker can be so to the second Lood practice prescribed by the physician, denter or our ally eating habits of the family.

We all know something a oil nutrified, and yet not read to executive the first importance. We rate size the first in the f

When we have identified slow starvation or malnutrition, it is both immoral and medically unsound to leave the disease untreated. We need to give complete and competent nutritional guidance, helping the family through the barriers of cost, misinformation, prejudice and apathy. Some fairly obvious points:

- Different people have different attitudes towards nutrition; some consider it a necessary routine, others a social obligation, still others a universal cure-all.
- Standards for "good nutrition" vary not only from one country to another or region to region, but also between ethnic, religious, social and other groups.
- Standards also change as our scientific knowledge of nutrition develops, and are affected (for good or for bad) by new theories and fads.
- Different foods not only contain different nutrients, but the body's ability to use those nutrients varies from food to food, and sometimes from person to person.
- Each nutrient has specific uses in the body.
- Many different kinds and combinations of foods can provide a well-balanced diet.
- The amounts of nutrients needed are influenced by age, sex, size, activity, and general state of health.
- Children need more food for their size than adults, because they are growing very fast and are usually very active. Babies under one year old have their own special food needs.
- Asking which nutrient is most important is like asking which hour of the day is most important for breathing.
- -Eating calories without concern for nutrients is like loading raw materials into a factory where there are no workers and the power is off: you just do not get the desired product.

The health worker should be familiar with supplementary food programs such as hot breakfasts and lunches in schools, and of course

surplus commodities and food stamps.

Poor nutrition equals poor health.

Nutritional screening has both a narrow and broader purpose. The narrow one is to identify the child with a nutritional deficiency, or habit problem, which can and should be dealt with directly. Perhaps the most important example of this is iron-deficiency anemia, discussed in the section on anemia in this workbook. A broader purpose is to exchange as much food-practices information as possible between the health worker and the parents and child, so that they can develop some nutritional guidelines which may not only improve the child's health, but perhaps also prevent or lessen the impact of certain dimease.

Nutritional screening requires:

- some knowledge of and understanding of the <u>community</u> served by the EPSDT program
- some knowledge of the <u>child and family</u>, developed from the questionnaire/interview and medical evaluations
- 3. some food intake information (what the child eats)
- 4. some growth and laboratory measurements.
- 1. <u>Community</u>: Eating habits and choice of foods, as we have already mentioned, differ widely according to geography, income, ethnicity, education and social custom. Some information about these habits—local food customs and local food sources—is necessary to the health worker, because it will provide clues to nutritional problems and suggest approaches to preventive care. The health worker should have a general idea of the availability and use of foods fortified with vitamins or minerals. For example:



- Most fluid milk today is fortified with Vitamin D, but nonfortified milk is often available at lower prices in rural areas and the inner city.
- Most fluid low-fat milks are fortified with Vitamins A and D, but powdered skim milk may not be.
- Most states require that bakery bread and rolls be enriched with iron, riboflavin, thiamin and miacin. Calcium and Vitamin D are usually optional, and additive requirements for flour and grains vary from state to state.
- Where rice or grits are a staple food, it is important to know whether foods fortified with iron and vitamins are also available and used.

- Where goiter occurs in children, availability and use of iodized salt is important.
- Fluoride supplements may need to be recommended where the fluoride content of community weter supplies is low.
- 2. Child and family: Nearly every part of the screening processing every part of the screening process questionnaire/interview, physical assessment, tests and a surrectiful provide some important nutritional information, and it is dresuseful to begin looking at a health problem from the nutritional point of view, if only to rule out nutritional habits as described as the primary cause of the problem.

Nutritional deficiencies and disorders usually reflect the accounts and educational status of the family and the community in which the live. The history of the child begins with the alarty of the propancy, and of the family history before that. But in addition and ditary and biochemical factors, the nutritional environment beginn with pregnancy may provide the most important clues to the child's health.

There is no point in nutritional screening without nutritional education, and this means that the health worker must—In addition to some roles—become a teacher of nutrition home economics, and even to be add sanitation. This does not mean that you have to be a separated and some separated with the parent and the child. And you do have to unpuration the importance of nutrition. Your attitude is contagious, and your interest and enthusiasm will be picked up by the samily (and hopefully by your fellow health workers).

Be prepared to let the parent teach <u>you</u>. Discuss what she or he thinks the family <u>should</u> be fed compared to what they <u>are</u> fed. You will probably be asked some questions to which you do not know the answer.

Don't let this bother you. Say that you don't know the answer, but if it is something you can find out before the parent leaves the office or clinic, try to do so. And encourage the parent to find some answers from his or her own experience. Try to build on ethnic or other food habits that will give the parents a sense of themselves and their strengths. It has been said that the best thing you can do for a child is to make her or his mother happy.

Aside from what the family provides, children often get food elsewhere, and it is important to listen to them and involve them in nutrition education. And where time permits, nutrition should be discussed with any family members whom the health worker sees together (this is particularly true of the father).

The effect of TV should also be explored. If the health worker feels it is necessary to counter the influence of a TV commercial, this needs to be done carefully—offering alternatives and not causing embarrassment. TV commercials often suggest foods that are easy but costly, appealing to children but with little food value, and that reinforce impulse buying.

There is always the question of how effective an educator the health worker can be in the amount of time allowed by the EPSDT program. Whatever time is allocated by the program supervisor, however, the health worker must be given the flexibility to develop background information which either the family, the worker, or both consider important.

Some children and families will present more cause for nutritional concern than others. But the health worker should feel competent to:

- Adapt available nutritional information to specific health, socio-economic and cultural needs.
- o Record food intake information to learn about the child

and family's eating habits.

- o Develop nutritional awareness in the family.
- o Look for reliable sources of food information, and evaluated claims made through product advertising.
- o Become familiar with agencies involved in nutrition.

Changing our own eating habits is difficult enough; asking someone else to change his or hers will often seem impossible. Nutritional pamphlets, which will usually be available in any pediatric clinic or office, are valuable, but not nearly as much so as a question-sudanswer exchange between health worker and parent.

3. Food Intake: Information about what the child eats is, if course, essential to nutritional screening. No single method of collections is information is entirely satisfactory, but for EPSDT programs a record of one day's intake, preferably a weekday (since ramility will often alter their eating routine on weekends), of food can be of great value in alerting health workers to the possibility of a nutritional problem. Furthermore, by comparing records for group children of the same age, sex, income level, and the like, we best to discover patterns of nutrition in the community, and can plan out health education strategy accordingly.

It should be noted here that while a food intake record will tell of if the person's diet meets an accepted standard, it does not tell up (without other information) whether the diet meets that person's saddividual requirements.

On the next page is a sample questionnaire for gathering information about a child's eating pattern for a single day.

FOOD INTAKE 24-Hour Recall

Attache	
Date and Time	of Interview
Length of inte	Prview Date of Recall Day of Week (1-M; 2-Tu; 3-W; 4-Th; 5-F
	(1-M; 2-Tu; 3-W; 4-Th; 5-F
(Say something	g like the following to the parent; let us assume the ch
in question is	a girl:)
from when she and what she a ate or drank a and drinks of	you to tell me about everything your child ate and dran woke up yesterday morning until she went to bed at nigh ate during the night. Be sure to mention everything she at home, at school, and away from home. Include snacks all kinds, and everything else she put in her mouth and also need to know where she ate the food. But now let
What time did	she get up yesterday?Was it the usual time?
	first time she ate or drank anything?
Where did she	eat?
	nave to eat and drink, and how much?
was eaten duri example, you multi- "When did she	mation is not volunteered, you will need to ask what els ing the day, when and where, and list the answers. For night ask:) eat again? "Is there anything else?" "Did she have to eat or drink during the night?"
Was the food	intake unusual in any way? YesNo
If yes, wi	ny?
	sy?
	she go to bed last night?
Does she take	vitamin and/or mineral supplements? Yes No.
If yes: I	Now many per day? Per week?
	That kind? (Insert brand name, if known)
	Multivitamins Ascorbic Acid
	Multivitamins Ascorbic Acid Vitamins A and D Iron



As with any other questionnaire/interview in EPSDT, the food intake record should be used by the health worker as an opportunity to pic.s up additional nutritional information which may be helpful, and to provide the parent (or child) with some nutritional hints, such as:

- Don't shop when you're hungry, if possible.
- Take a list with you when you shop.
- Eggs are cheaper than bread or crackers, which in turn are cheaper than cookies.
- Roast beef is cheaper than bologna.
- Powdered milk is cheaper than cols drinks.
- School lunch programs are not too good if your child throws away the good stuff and only eats the dessert.

4. Growth and Laboratory Measurements: Height, weight and head circumference are important indices of nutritional status, and are discussed separately in the earlier workbook on growth assessment.

Laboratory tests for nutritional screening, other than those ordered for special studies, will generally consist of hemoglobin concentration and/or hematocrit determinations. They are discussed in the following section, on anemia.

APPENDIX (Form and Tables)

The questionnaire below has the following advantages:

- It is brief ..
- -- It avoids any leading questions.
- It gives the community health worker information regarding the nutritional habits of the family. This information can then be used to educate the parent in the areas necessary and therefore perhaps improve the nutritional status not only of the child, but of the whole family.

NUTRITIONAL HABITS AND PRACTICES: QUESTIONNAIRE

- 1. What do you think about nutrition?
- 2. What are the foods you usually include at mealtime?

Breakfast	Lunch	Dinner

- 3. What foods are eaten between meals?
- 4. What foods are eaten most frequently?
- 5. How often are sweets, pastries, soft drinks, Kool-aid, and alco-holic beverages used?
- 6. How do you usually prepare your foods?
- 7. Is there anything special you do to keep your family healthy?

IMPORTANT THINGS TO KNOW ABOUT SOME VITAMINS AND MINERALS

Listed below are some of the most necessary vitamins and minerals which are required for the maintenance of good health.

The vitamins are divided into two groups: water soluble and fat soluble. This information is important because, for example, if one would like to cook a dark green vegetable which is rich in Vitamin A, if one knows that Vitamin A is fat soluble then one would cook it with some amount of fat in order to dissolve it. The same kind of principle goes for foods rich in a water soluble vitamin, and in such cases, of course, we will not throw away the water, since it is rich in vitamins.

WATER SOLUBLE VITAMINS

NAME	SOURCES	FUNCTIONS	EFFECTS OF DEFICIENCY
Vitamin C	Citrus fruits, tomatoes, melons, cabbage, broccoli, strawberries, fresh potatoes, green leafy vegetables	Very little storage in body. Aids absorption and use of iron. Important in building up of collagen, a protein found in the skin, bones and cartilage. Also important in the formation of intercellular cement substances	Weakened cartilages and capillary walls. Skin hemorrhage. Sore, bleeding gums. Anemia. Poor bone and tooth development. Scurvy, a disease characterized by blood discharges and abnormal formation of bones and teeth.
Vitamin B	Whole-grained and enriched breads, cereals, flours, organ meats, poultry, fish, legumes, nuts, milk, green vegetables, pork, other meats	Its body storage is li- mited. Chiefly in- volved in carbohydrate assimilation and dis- integration process.	Produces poor appetite, con- stipation, mental depression, apathy, cardiac failure, beri- beri (a deficiency disease associated with malnutrition).

NUTRITION
AND
ANEMOLA

NAME	SOURCES	FUNCTIONS	EFFECTS OF DEFICIENCY	
Vitamin A	Animal: Fish-liver oils, liver, butter, cream, whole milk, whole milk cheeses, egg yolk. Plant: Dark green leafy vegetables, yellow vegetables, yellow fruits, fortified margarines.	Bile, a secretion of the liver, is neces- sary for its absorp- tion; it is stored in liver. Maintains healthy skin and nor- mal vision in dim light. Effects the building up of con- stituents of mucus. Large amounts are toxic	Causes faulty bone and tooth development. Night blindness.	
Vitamin D	Fish-liver oils, fortified milk, exposure to sunlight; very small amounts in butter, liver, egg yolk, salmon, sardines.	Formed in skin by activity of sun- light. Stored chiefly in liver. Regulates absorp- tion of calcium, phosphorus, and normal use in bones and teeth. Large amounts are toxic.	Rickets in children. Soft, fragile bones, enlarged joints, bowed legs. Chest, spinal, pelvic bone deformities. Delayed dentition. Tetanic convulsions in infants. Osteomalacia, softening of the bones, in adults.	
Vitamin E	Plant tissues, vegetable oils, wheat germ, rice germ, green leafy vegetables, nuts, legumes.	Not stored in body to any extent. Reduces oxidation of Vit. A, carotenes, and polyun- saturated fatty acids.		

FAT SOLUBLE VITAMINS (cont'd)

NAME	SOURCES	FUNCTIONS	EFFECTS OF DEFICIENCY
Vitamin K	Green leaves such as alfalfa, spinach, cabbage. Liver. Synthesis in intestine.		Hemorrhagic disease in newborn infants.
SOME MINERAL	<u>.s</u>		,
Calcium	Milk, hard cheese, ice cream, cottage cheese. Greens: tur- nip, collards, kale, mustard, broccoli. Oysters, shrimp, salmon, clams.	Hardness of bones, teeth. Transmission of nerve impulse. Muscle contraction, normal heart rhythm, activate enzymes. Increase cell permeability, allowing the passage of fluids or substances in solution.	
Iron	Liver, organ meats; meat, poultry, egg yolk. Enriched & whole grain breads, cereals. Dark green vegetables. Legumes. Dark molasses. Peaches, apricots, prunes, raisins.		Anemia, frequent in in- fants, pre-school children teen-age girls, pregnant women.
Phosphorus	Milk, cheese, eggs, meat, fish, poultry, legumes, nuts, whole grain cereals.	Structure of bones, teeth. Cell permeability. Meta- bolism of fats and carbo- hydrate.	

NAME	SOURCES	FUNCTIONS	EFFECTS OF DEFICIENCY
Iodine	source. Seafood. Foods grown in non-goitrous coastal	metabolism, or all phy-	Single goiter, which if severe can cause cretinism, charac- terized by a lack of physical and mental development.

A well-balanced diet for children will have a combination of foods of the following categories:

	Dark green and deep yellow vegetables and fruits	Citrus and other vitamin C foods	Other vegetables and fruits
WHAT KIND?	Kale, spinach, broccoli, cress collards, beet and turnip tops other dark green salad greens; Sweet potatoes, carrots, yellow aquash, pumpkins, apri- cots, cantaloupes.	Oranges, grapefruit, tomatoes (fresh, frozen or canned); Cantaloupes, melons, straw- berries, raw cabbage, green peppers.	Potatoes,* prunes, other dried fruits; bananas, turnips, pears, apples, peaches, fruits in season
HOW MUCH?	One or more servings, at least every other day.	One or more servings each day.	Two or more servings each day.

^{*}Potatoes are a very good food value for their price.

	Milk, cheese and ice cream	Meat, fish, poultry and other protein foods	Eggs	Dried beans, peas, nuts; peanut butter	Breads and cereals
WHAT KIND?	Whole milk, canned evapo- rated milk, powdered	Beef, fish, poultry; heart, liver, kidneys; canned fish	Any kind	Dried beans and peas; peanuts and peanut butter; soybean products. (At times these can take the place of meats.)	Breads made from enriched flour, cereals made from whole grain; grits, rice, macaroni
W MUCH?	3 to 4 cups of milk a day; children over 2 can take part of this in the form of cheese, ice cream, or in pastries	If possible, one serving each day. Can be replaced by more milk, eggs, cheese or dried beans.	At least 4 a week per child. Can take the place of meat.	A few times per week, or in the place of meat.	Bread or cereal at each meal,

2. ANEMIA

Anemia is a condition which refers to a low amount of hemoglobin (contained in red blood cells) in the child's blood. Anemias are sometimes hereditary, as in sickle cell or similar anemias, and need continuing medical supervision. Most anemias, however, are nutritional and relate to the child's food intake. The most common of these is iron-deficiency anemia.

By screening for anemia, we can:

- identify and revise eating patterns that lead to iron-deficiency anemia
- identify other forms of chronic anemia so that symptoms and complications may be prevented or reduced.

Iron-deficiency anemia, if identified and treated early, will not cause symptoms or be a danger to the life of the child. But if left alone, iron-deficiency anemia can reduce resistance to infections, reduce the child's attentiveness and ability to learn, and (in adolescent girls) increase the risk of an abnormal pregnancy.

Iron deficiency is easily and inexpensively treatable, and once treated, its recurrence can be prevented by simple and inexpensive dietary changes. Iron-deficiency anemia can be prevented; the question is, which approaches to prevention are most practical?

Careful inquiry and counseling about diet in the first year of the child's life could prevent all instances of iron-deficiency anemia in early childhood. This is true preventive care, eliminating other risks associated with anemia as well as the cost of later treatment.



The incidence (occurrence) of anemia follows this pattern:

- a) Immediately after birth. . . . from 2 to 5% of children have it
 - b) Between 9 and 18 months old. .from 5% to 15% develop it, with a small proportion of cases severe enough to cause symptoms and even
 - enough to cause symptoms and eve be a: threat to life

 c) Between 11 and 14 years
 (during the adolescent

A child who has a normal test around one year of age will rarely develop anemia before adolescence, so re-testing is not necessary until then.

The dietary history (and the brief questions usually included in the medical history questionnaire/interview) will often point to causes of iron-deficiency anemia in infants. A child who is drinking more than a quart of fresh milk each day when he or she is between the ages of six and eighteen months, and probably not eating any other foods, is much more likely to develop iron deficiency and other nutritional problems than one who is eating other foods and drinking less than a quart a day of reconstituted evaporated milk or a commercially prepared formula. In fact, infants of this age who are drinking large amounts of fresh milk should have their det modified whether or not they have a "positive" screening test for anemia.

Infants that had a low birth rate are also particularly susceptible to anemia during their first year of life, and the program physician will probably recommend that such children also be screened when



they are around six months old. Other, more susceptible infants are those of multiple births (twins, triplets, etc.), and perhaps those born to mothers with several recent pregnancies, or who are very young. Also, iron-deficiency anemia will occur more frequently in certain localities, and still more frequently among low-income groups.

The major attack on iron-deficiency anemia, however, needs to be through education—of both the health workers and the parents. The need of the infant, the pre-school child, and the fast-growing adolescent for iron needs to be stated repeatedly and in different ways. Primary emphasis should probably be placed on the role of iron-fortified formulas and iron-fortified cereals, as well as meat, fish, choese



and eggs, always bearing in mind that it does little good to persuade families in this way if the cost is seen as too great a barrier.

Parents whose children are screened as normal should, of course, be encouraged to continue their distary practices, and should be congratulated by the health worker. Where a change of diet is prescribed for the iron-deficient child, it should be noted that while human milk and cow's milk are poor sources of iron, commercially prepared



trained and "junior" foods for inflat. The office of pull received the state of the

The two currently acceptable method to accept to the output of the outpu

The microhematocrit method is simple and accurate. Blood is obtained from a finger or heel prick, sealed into a special capillary tube, and placed in a special centrifuge (spinning device). The centrifuged capillary tube is then placed on a special reading device which indicates the volume of packed red blood cells as a percentage of the



total blood volume. This packed cell colume is thereof to be the hematocrit.

Remoglobin determinations require care, skill in a period of the a greater extent than the hematoria. The most two is heal prick must be carefully measured in an accurate out of the glass tube), then mixed with a carefully measure about it flutton. The optical density of this solution is measured as the interior of called a photocolorimeter, and the results are read in the number of memoglobin per 100 milliliters (ml) of whole blood. Autmatic" pipettes with a pre-measured amount of dilutent make the measurement accurate.

Both the hemoglobin and hematocrit methods may be used in the screening program, in which case each serves as a check on the accuracy of the other. The "normal" values for different age groups will be established

for the particular program and laboratory. Values suggested by the Academy of Pediatrics are:

Age	Hematocrit (%)	Hemoglo in (gm/ 00 ml)
2-5 days ·	45% or higher	15 grams or higher
2 months-2 years	33% or higher	ll grams or higher
2 years-10 years	36% or higher	12 grams or higher
over age 10	38% or higher	13 grams or himer

In obtaining blood from the finger or heel prince

- 1. The skin should be cleaned and then dried.
- 2. The dry finger or heel should be warm.
- The blood should flow freely (without having to squeeze c= "milk" the finger) into the tube or other collecting devices
- Clean the finger again and apply a band-aid or other protection, if desired.
- 5. Put the sample in a cool place until ready for lab procuring

QUESTIONS FOR THE TRAINEE

- o What is the difference between nutritional status and nutritional habits?
- o Which one of the two do you consider more important? Why?
- o Is one nutrient more important than another?
- o Why is it important to understand the community served by the EPSDT in nutritional screening?
- o What are some causes for nutitional deficiency?
- o What is anemia?
- o What is the pattern of the incidence of anemia?
- o Which are the two currently acceptable methods of screening for anemia?

WORKBOOK V



" CASE MANAGEMENT "

Case management is the process by which the chila (until age 11) and family are assisted in remaining within the EPSD1 program until optimal results are obtained, and a high level of health maintenance is assured.

1. Definition

The phrase "case management" is sometimes used interchangeably with "tracking." Tracking, however, is an administrative device. It is usually an impersonal record-keeping system which gives management some indication of whether patients are staying within the program, and which

services offered by the program are being utilized. Case management requires not only access to this tracking information, but also making effective use of it. Case management is a broader, more personalized concept which deals with the many large and small events that encourage, postpone, facilitate or prevent the effective use of the different program services.

Case management can also be described as including and expanding healthrelated supportive services—that is, casefinding, referral, and the follow-up process—while helping to remove barriers which prevent communication and understanding. Case management requires:

- o A problem-oriented approach to record-keeping, which reminds us to look at all of the problems which bear on the child's health
- o Some home visiting
- Written messages and information to keep the family up-todate and involved with the total EPSDT program.

Staff members must keep their minds open, free of stereotype opinions and understand why people do not keep appointments, do not follow recommended treatment, or do not respond to staff effort. They must direct their efforts toward correcting the problems that interfere with the most effective use of available resources.

2. Referral

Case management includes referral and follow-up. "Referral" is the procedure which occurs after a child is found to have an abnormal test result, and the family is directed to an office or clinic where the child's condition can be evaluated, and necessary treatment provided. "Follow-up" is an extension of referral. It finds out whether the

referral actually took place, whether the evaluation or recommended treatment was completed, and assists where needed in arranging for these to happen.

The number (percentage) of children referred from a screening program depends on several factors:

- o The health of the particular children being screened. If case-finding is really effective, the "hard-to-reach" children will be brought into the program, and these children are more likely to have potential health problems requiring referral.
- o Particular health hazards in a given community will, of course, affect the number of children referred. For example, rural children exposed to pesticides, or central city children exposed to lead paint.
- o The "cut-off points" (criteria for referral) set by the physician and special consultants to the program. Some tests will clearly indicate whether or not the child should be referred; but other tests may produce borderline results in which referral becomes a matter of medical discretion.
- o Related to the above is the skill and effectiveness of the whole EPSDT screening staff. Poorly trained health workers will find it difficult to conform to referral criteria: at times, they will overlook existing problems (under-referring), while at other times they will "find" abnormalities in children who really have none (over-referring).
- Referral may to some extent be affected by the availability of treatment resources, whether or not Medicaid reimburses for the services.

Whether the referral is made within or outside the program depends, of course, on whether the appropriate diagnostic and treatment services are "in-house," as in the case of the EPSDT program which is part of a medical facility, or whether the child must be referred elsewhere as in a free-standing screening facility. The advantages and drawbacks of these two types of programs have already been discussed. The important point here is that outside referral requires particular attention to follow-up.

Every step in the referral process must be carefully performed. These include:

- o Confirmation of the need for referral and support services: making sure that no unnecessary referral is made.
- o Detailed review with the family of the need for referral. The mother (or other person responsible for the child) must fully understand the reason for, and importance of, referral; only then can you be assured of her co-operation.
- Development with the family of a plan for dealing with the whole referral process.
- Referral to the right place at the right time, and assurance of their availability and accessibility.
- Assistance to the family (at least at the outset) in making the necessary appointments.
- o Arranging for transportation and baby-sitting, if necessary.

Referral will usually require the forwarding of information from the patient's record, and this requires the parent's permission. In most programs, this written permission is included as part of the enrollment form so that it will not be necessary to go back to the family for permission later on. No family, however, should be forced into accepting referral unless the program physician decides that there is an impending threat to the life of the child.

A sample referral slip is on the next page.

		CHART	NO.	
	(Name of Clinic)	DATE		
	(Name of Clinic)			
	(Address)			
•	(Phone No.)			
		BIRTH		
NAME		DATE		
ADDRESS				
		PHONE		
NAME(S) OF PARENT(S)_				
REFERRED TO	١			
REASON FOR REFERRAL:				
	SIC	GNED		
REPLY:				

SIGNED

3. Follow-up

Case management also requires follow-up to determine whether referral procedures have been carried out, whether recommended treatment was followed, and to assist in assuring that this is taking place where needed. There is often a good reason for missed appointments (lack of transportation or baby-sitting, interference with work schedules, for example), and again, health workers should be careful to find out those reasons before jumping to conclusions about the family's use or misuse of health services. Nor should there be any hint or threat of reprisal in talking to the parent. For poor people, health is often forced to become a second priority. Follow-up should include detailed knowledge from the family regarding their experience with an outside agency, for it is sometimes that agency which has not lived up to its



responsibility in the "continuum" of care, and the health worker can help bring this to the attention of both the EPSDT program and the outside agency supervisors, and thereby facilitate more effective, collaborative arrangements.

4. Follow-up Methods

These methods will vary with the organization of the program, but will generally include one or more of the following:

Rome Visits. This method is perhaps the most simple and effective in terms of communicating with the parent. The family will already be familiar with the program, and there should be no doubt or suspicion of the EPSDT health worker. In a home visit, the health worker is also able to see more directly whether the child has been given the necessary attention, and if progress has been made in the child's health and environment. The disadvantage of home visits is that they are generally the most costly method of follow-up. This can be reduced, however, if the health staff is trained to limit home visits to those cases where they will be most effective. Also in some areas, home visits of health department nurses.

Telephone Calls. This is a fast, economical method of follow-up, but it is less personal than the home visit, and of course not every family will have a telephone. When a neighbor's phone is used, the health worker should be careful not to ask questions whose answers might be confidential.

Mail. This method is still more impersonal. There is also the difficulty in knowing whether the letter was in fact received, and there can be no assurance of a response.

Contacting the Referred-to Office. The health worker can call

the office or agency to which the child was referred, and find out if the necessary service was provided. Beyond simply finding out if an appointment was kept, the health worker should first have the family's permission to ask for medical information.

Report Received from Referred-to Office. This report should be added to the patient's record to provide a basis for follow-up, assure that appropriate treatment is received, and indicate the outcome of the referral.

As elsewhere in the EPSDT program, confidentiality in follow-up is essential. No family likes to have personal information known to "everybody," and that information can often be misinterpreted or misused. As a guiding rule: no patient information should go outside the screening program without the parent's specific consent.

Problem-oriented Records (POR)

This is a relatively new system of clinical record-keeping which can help in referral, follow-up and case management, because it presents an easy-to-see picture of the child's state of health. For the health worker, the problem-oriented record can also help make clear that the responsibility for outcome is the result of staff effort.

The purpose of the problem-oriented record is to clarify the various aspects of the child's problem, since each of these aspects may require a different kind of attention. Briefly, the problem-oriented record requires the health worker to identify, list and number all of the family's medical, emotional and social problems. This list is placed at the front of the record, much like a table of contents, and all subsequent items in the record are cross-indexed to the numbered problems. The list is modified as problems change, and those that are resolved are marked as such. New problems are added to the list as they occur.

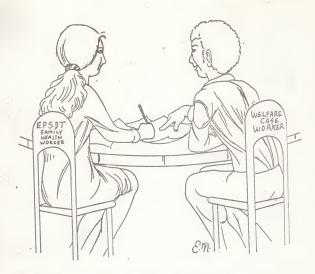
This approach is intended to put information into a logical sequence, reduce the volume of notes in the record (largely by avoiding the need for repetition), and provide a quick way of orienting different staff members to the many and related needs of the family.

The problem-oriented record needs to be clear, short, informative and to the point. It can be learned rather quickly, but requires somewhat closer supervision than traditional record-keeping systems. Neither the supervisor nor the trainee should become preoccupied with the system and structure of problem-oriented record-keeping; the important point is that it should encourage logical thought processes, planning and action; and make the health worker better aware of the problem of the "whole patient," not just of a particular disease or illness. A sample of problem-oriented record-keeping is on the following two pages.

Inter-agency Relationships.

As with case-finding and other socially-oriented functions, case management is carried out best in partnership with other community agencies. Often, the case management of Medicaid beneficiaries and of those who receive public assistance is the responsibility of "social service" departments and the welfare worker. The EPSDT program should not intrude on this responsibility, and it is therefore important that EPSDT and local welfare staffs join at the beginning in planning and defining areas of co-operation. Once certain basic agreements have been reached, task assignments and the division of labor can be explored and acted upon. For example, the EPSDT program can refer a child to the Welfare Department case worker for subsequent referral to a particular specialist, or the case worker may do the follow-up in the course of other visits. An important benefit from this type of collaboration, beyond the obvious economy in the use of personnel, is that the family will be protected from receiving numerous and

Jar POR John Sample (sa p. 290 of draft)



confusing messages about services and the ways of obtaining them. The number of official contacts with the family can be reduced, and a more consistent relationship with EPSDT and welfare staffs can be achieved.

Intervention and Referral

Any successful health program has an aspect of intervention. This means that it interferes, hopefully for the good, not only with the disease process but also with some of the day-by-day activities of the individual or family. As difficulties appear, intervention should offer the family a new way of solving a problem, hopefully in a climate of feeling that somebody cares. In EPSDT, this intervention begins with



case-finding and outreach, and continues through case management.

Every now and then, this intervention will take place under conditions of stress which call for immediate help and supportive services outside the usual responsibilities of EPSDT. The health worker recruited from the community has easier access to that community than the "professional," and may have a natural talent for understanding and reacting to these urgent needs.

EPSDT offers numerous opportunities to reinforce the family's problem-solving effort. While the family is uniquely organized to deal with problems of stress, individual members of the family are not immune to the stress that may be concentrated on another family member, and may need outside support. The role of "stress mediation"—helping an individual or the family through a crisis period--can be assumed by the EPSDT health worker.

As a community health worker, you will come upon many different types of stress and crisis. In some cases, the need will be very clear; in others, the need will be camouflaged or hidden. With time, the inexperienced health worker can learn to recognize stress or crisis situations and sort out those elements of the situation which show potential for solution or improvement. This means that you will acquire the diagnostic capacity for hearing words and limening to answers that give clues to emotional strain or tension. This requires new insights and self-understanding as well as an understanding of how the family is sometimes compelled to behave and function in a poor environment.

Again, the range of stress or crisis situations that bear on the cuild's physical and emotional health, directly or through the family and social environment, is large, and may include such problems as:

- o lead poisoning
- o accident or death in the family
- o severe drug or alcohol abuse
- o child abuse
- o child in trouble with the law
- o eviction from residence
- o repossession of car or appliances
- o loss of job
- o incapacitating illness or serious illness with poor prognosis.

Before intervening in these kinds of situations, you will need to consider the <u>time</u>, the <u>place</u>, <u>what</u> help might be given, and <u>how</u> you are going to give it. For example:

Time. Is the child's parent too upset to concentrate on what you are saying? Is there a crying child who should first get attention?

Place. Should you give the parent advice in private, or would it be better to do it with the child present, or in front of all the family? The answer might depend on whether you want to concentrate your support on individual or group problem-solving. Or it might depend on the importance of your confidential relationship with one individual.

What help you can give will depend on whether appropriate supporting services are available in the community. You need to be familiar with those agencies or services that do exist, know the types of referral they will accept, and under what conditions. As examples: a drug abuse program may only accept people of a certain age; there may be no suicide prevention clinic in the community, but a "hot line" might be available to a clinic elsewhere. Where you strongly suspect child abuse, you can alert the EPSDT nurse or doctor who can arrange to examine the child to see if special intervention (social worker, police) is necessary.

<u>How</u> to intervene and give help brings us back to your sensitivity and understanding as a community or family health worker. You will know those things you should not do, such as suggesting that the parent or other family member is to blame (you can give constructive criticism later on, after the "crisis" stage); and you will know those things you should do, such as trying to see the problem as the parent sees it (even though you have a different opinion), and finding a solution that satisfies the <u>family</u>, not the agency or staff.

The chart on the following pages may be a helpful model for classifying problems and identifying referral resources. . . (Nurse of physician)

Address & Phone(s) Key Person to Contact

Potential

Lead poisoning

Problem Areas

divorce, eviction, wage

attachments, repossession, etc.)

Secondary Referral

(Housing inspector;

(Ambulance Service)

Resources

Health Dept.)

Bureau, etc.)

Problem Areas	Major Referral Resource	Secondary Referral Resources
Police/Legal problems (Child in trouble with police; traffic cita- tions; minor arrests; probation and parole problems)	(Public Defender; Police-Community Relations Councils; Bail bondsmen)	("OR"Own Recognizance- programs; citizen advocacy groups
Unemployment	(Employment agencies; special employment projects)	(Skills or on-the-job training programs; employers)

QUESTIONS FOR THE TRAINEE

- o In doing follow-up:
 - a. Which method would you use? Why?
 - b. Which method would you not use? Why?
- o What do you understand by "Intervention and Referral?"
- o If you found out that the family you were working with had some housing problems:
 - a. Would you know the different housing agencies in your community to which to refer them?
 - b. If not, how would you find out about them?

WORKBOOK VI

EVALUATION

A successful program of services or training includes some sort of procedures for on-going evaluation. In order to discover the importance of evaluation, the following questions should be explored:

- 1. Why do we want to evaluate our program?
- 2. What is it we want to evaluate?
- 3. How are we going to do the evaluation?
- 1. In any program, there are operational problems or deficiencies for which the administration and staff are accountable. Accountability has in fact become a watchword in today's social programs. We need to account for what we are doing, and why we cannot do it better or more cheaply. Evaluation is a method of improving services—directly or indirectly. We look at what we are doing, measure its effectiveness, make some comparisons, and then decide what changes need to be made.
- 2. There are many aspects of an EPSDT program we might want to evaluate:
 - (a) Consumer utilization and satisfaction

Are we providing the services in a manner acceptable to the community? Are they available to those in need? Have the services been publicized? Is there adequate transportation? Is there an avenue for the community to make comments, register complaints, or participate in decision-making?

(b) Quality

Are there procedures for quality control or assessment? Is there adequate professional supervision? How much time is spent with the child or family explaining and reviewing the tests?

(c) Costs

What is the cost per procedure or test component? Why are there different costs for different tests? Can we determine the efficiency of these tests? What are the cost benefits? Have we duplicated services already in the community?

(d) Outcome

Have we been effective? Have we accomplished our goals?

(3) Staff

Are the right people in the right jobs? Are there welldefined personnel policies? Is there on-going training and staff development? How effective is it?

3. We have given some examples of what we might evaluate, and the next question is how we want to do it.

(a) Routine records

Every program should have routine records which report on utilization, costs, and the prevalence of certain types of health problems. From these records we can answer such questions as:

- Of the estimated number of children in our "target" area, how many have we seen?
- Of the children screened, how many were referred for diagnosis and treatment? For what conditions?
- Of the children referred, how many did not receive the services recommended?
- Of the families referred, how many failed to keep their see appointments? Why?

(b) Special staff reports

Staff members may be asked to report on their particular function or assignment:

What elements of the family interview were successful? What procedures are too time-consuming? Which ones

seem most effective?

(c) Staff conferences

Discussion between staff members may refine the evaluation process and move it forward. Group meetings offer the opportunity to "compare notes" and perhaps develop some consensus on problems and their solutions.

(d) Consumer critique

Evaluation often tends to be subjective. In a program such as EPSDT, it may be very useful to include the observations of the family as well as the staff member. This can be accomplished through questionnaires (perhaps distributed or mailed to a sample number of families), or through inviting parents to attend staff conferences from time to time.

Evaluation of training

During the initial training program, we can measure the progress of the trainee through questions covering the different subject areas. Further evaluation will occur as the supervisors report on the competency of trainees in their new job assignments. But we should try as early as possible to engage each trainee and health worker in the process of evaluating the service he is performing, and then take that evaluation seriously in putting together the total program evaluation. If this can be accomplished, the health worker will automatically be evaluating his own performance, and will provide administration with valuable insights for improving the program.

Some sample reporting forms follow.

(Name of clinic)

DAILY OUTREACH LOG MILEAGE

DATE

NAME

CODE

0-12 mos.----1 1 yr.-4 yrs.---2

4 yr.-12 yr.---3
12 yr-18 yr.---4 18 yr-21 yr.---5

PATIENT NAME	CT	ADDRESS	AGE	SEX	NEW	FU	MEDI-CAL
	-				-	-	
	1.						
	_				-	-	
						_	
						1	
			_	-	+	+-	
	-	· ·			-	+	
						-	-
				-	-	-	-

TOTAL NO. OF INTERVIEWS

(Name of Climc)

SCREENING STATISTICAL SHEET

DATE	ET	HNIC	ITY		AG				SE	X		COM	M.	DEV	7. A	REA		# REF	# TL.
	BLK	WHT	OTHER (Speci- fy)	0-12 mos	1-4	5-12	13-15	16-21	M	F	1	2	3	4	5	6	0.8.		
								1				-							

DATE	NAME	CHART NO.	AREA	CT	REASON	REF. TO	REPLY	SIGNED
								<u> </u>
						1		

How many children (or families)	did your casefinding	method produce
this week?		
Which method worked best?		
Telephone	Follow-up of	
Home visit	check stuffer	
Post card	Other If so,	_
Check stuffer		
Windows Charles and Charles an		
Which program interpretation se	emed to work best?	
This will give your childre	n a good start in life.	
This will help you take goo	d health care of your	family.
The State wants to help you		
State in one paragraph your met		
·		
What behaviors on your part see	med to work best?	
Own enthusiastic belief in		
Provided with transportation		
Provided for baby sitters		
Made home visit to those in	terested	
What part of training did you m	ost enjoy, or get the r	most from or find
produced the greatest change		2001, 17
Participation in program	Supervising	Role play
Orientation	conferences	Demonstra-
Planning	Videotape	tions
Staff meetings	recording	Film
Case conferences	Sensitivity training	strips
Written quizzes	Group problem	Work- shops
Group meetings	solving	attoba

	Lectures Community Organizationsvisits
	Discussions of race, culture and values
	Other (Specify)
Wa:	s there enough training? YesNo
	If no: What more do you think should be added? List or describe.
We	re you able in the training to build on your own experiences?
	YesNo
	If yes, list them
Th	rough the training, what did you discover about yourself that you
	never thought of before?
	Did not like poor people
	Did not like welfare recipients
	Thought all welfare recipients were lazy
	Did not think I would like working with several different ethnic
	groups
	Did not know I was so interested in children
	Other (Specify)
Ar	e you in favor of public medical care? YesNo
	If yes, list at least three reasons in one paragraph:
Aı	re you in favor of raising welfare allowances? YesNo
	If yes, explain why, with at least three reasons:

What tasks do you feel you have mastered? List.

What do you believe to be your greatest difficulties or weaknesses in reaching out to people? List five.

What do you think are the most important things about EPSDT? List five.

What do you think are least important? List.

What suggestions do you have for improving the program? List.

What objectives of the program do you most agree with?

What objectives of the program do you least agree with?

Are the objectives specific enough for your work purposes?

Yes_____No____ How could they be made more specific?

What would you do to enlarge the number of enrollees?

Why do you think we were not reaching enough families?

SUGGESTED ASSESSMENT CHART

Value orientations

Poor people are hard to deal with in health

matters because:

Poor people do not

believe in health care when they are well.

Middle-class workers do not know how to talk to poor people.

AFDC families are chronically dependent

people.

Value beliefs Poor people can never

improve.

They would rather spend money on other things.

Turn off the needy.

They are shiftless and can never join the dominant

culture.

Characteristics to look for in applicants and trainees

Maturity Stability Tolerance

Changes

Experience Commitment

Credibility

GLOSSARY

Most of the technical terms used in these workbooks are defined in connection with the subject matter being described. There are some, however, that have been used in other contexts and which may be more difficult to comprehend, since they are not in general usage.

Anticipatory guidance

Informing the parent about what changes children go through within their normal growth and development.

Back-up services

Additional services, within the program or from outside agencies, necessary to make the primary service more effective or the care more comprehensive. Examples range from transportation to legal services, from laboratory to specialty referral agreements.

Community-based programming

"Community-based" is a term used to distinguish services located near the families in the community from services operating at the federal, state or county level, or within institutional walls. "Communitybased" is almost a synonym for "accessible."

Confidentiality

Confidentiality is a supporting feature of all helping relationships. It implies and cements the trust upon which these relationships turn. In that context, the individual in need of help is willing to say the things that will enable a helper to understand his or her problem.

Most people feel a threat of exposure when they confide their innermost thoughts. Therefore, there must not be the slightest doubt about the ethical position of the helper with respect to confidentiality. Otherwise, the person in need of help may withhold information crucial to the determination of the kind of help most appropriate to the solution.

Family-centered

"Family-centered" is a term used to cover a philosophy, an approach to problem-solving, and a way of perceiving certain conditions. For example, some medical care problems such as diabetes and sickle cell disease have genetic or familial predisposition. Infectious diseases like tuberculosis are transmitted to people living in close proximity, often in families. Still other conditions such as hypertension, coronary artery disease and depression seem to have a family pattern, and new bodies of knowledge indicate social patterns of illness among family members.

Family-centered care denotes awareness of a potential family pattern of function and dysfunction, social as well as physical. Simply put, it says that in planning and operating a comprehensive health care program, the interdependence among family members makes undesirable and unworkable the isolation of one member of the family from another.

Family Health Worker

A paraprofessional health worker, trained to see the patient in the context of the family and community, with emphasis on prevention, education and health maintenance. The Family Health Worker acquires many of the traditional skills of the nurse, social worker, health educator and community organizer.

Free-standing programs

Usually describes health facilities or services which are physically separate from, and not under the direct supervision of, hospitals or health agencies.

Medicaid client

A person eligible under state and federal Medicaid regulations to receive assistance for the payment of physician and hospital bills, and for other approved services.

Medical care versus health care

Medical care is the narrower term, generally referring to the services of a physician or hospital, but emphasizing treatment rather than preventive services. Medical care focuses on illness and how to bring the patient back to health. Health care focuses on how to keep a person from becoming sick.

National Health Insurance

A nation-wide system for financing health care. The scope of benefits, as well as the mechanisms for pre-payment, vary with the legislative proposals which, at this writing, are before Congress.

Negative finding

A test result which indicates no present need for further evaluation or action.

Out-patient

 ${\tt A}$ patient or medical service not requiring a hospital bed. The term is often synonymous with "ambulatory care."

Parent

Person or persons who are responsible for the care of the child. They could be a relative, guardian or foster parent.

Positive finding

In screening, a positive finding is the result of a test or questionnaire which indicates the presence of a disease symptom or problem which needs to be professionally evaluated (diagnosed) and perhaps acted upon.

Primary care

For purposes of these workbooks, primary care is the first set of encounters with the patient for the purposes of remedying illness or making diagnostic assessments that lead to referrals for subsequent care and treatment services.

Self-determination

The ability to decide by oneself without external constraints.

Self-help

A term to describe what individuals or groups do to solve their own problems with or without outside help. The term is not necessarily confined to what one family or person will do about their own particular situations. It includes the banding or grouping of neighborhood people, families and others with common problems. This coming together has several purposes: to help one another either under the guidance of some professional specialist or as a result of learning from some specialist how to do it. At times, organizing around common problems leads to a "movement" on behalf of new or improved services. One example is in nursery schools, where mothers have allied together under the auspices of school authorities and educators to conduct nursery school programs at a far lower cost than might otherwise be available.

Socio/economic/psychological condition

A term to describe the effects of income, community and the general environment on a person's attitude and sense of well-being.

Start-up cost

The capital (building, equipment) and operating expenses (salaries, supplies, etc.) necessary before the facility or program obtains revenue for its services.

SUGGESTED SCHEDULE FOR USE OF TRAINING GUIDE

FOR PART II

Session I.

- Discussion of EPSDT and legislation.
- Services and their importance.
- Standards; setting costs.
- Some organizational models.
- Advantages or disadvantages.

Session 2.

Discussion of your screening program:

- Services offered.
- Considerations taken into account for choice of services.
- Discussion of the different factors present in your community that affect your program.

Session 3.

- Field visit to existing programs.
- Field visit to community.

Session 4.

- Discussion of field visits and the impact of trainee observations on your program. Changes? Improvements?
- Discussion and work on the exercises of the chapter.

FOR PART III

Session 1.

- Discussion of casefinding, its importance, goals and methods.
- Discussion about your community and the existing resources which could be used to share the casefinding task.

Session 2.

- Practice through field visits or role-playing.
- Discussion.

PART IV-A

Session 1.

- Medical history-taking and screening objectives.

Session 2.

- Child's birth history and child and family illness history.
- Review some history forms and discuss reasons for the information requested, and its importance.

Session 3.

 Infant feeding: practice questions with staff members who might have children.

Sessions 4-10.

The next six sessions could follow the pattern of session 3. If possible, visual aids should be used for discussion of different organs and systems.

PART IV-B

Session 1.

- Immunization and its importance.
- Understanding of the diseases which immunizations attempt to prevent.

Session 2.

- Mock interview for immunization status.

· PART IV-C

Session 1.

- Understanding of developmental screening.
- Consequences of abnormal development of children.
- Relationships between developmental problems, etc.

Session 2.

- Discussion of developmental questionnaires.
- Study and comparison of these different questionnaires.

PART IV-D

Session 1.

- Basic principles of vision screening and its importance.

Session 2.

 Understanding of vision problems and their impact on a child's development.

Session 3.

- Practice in vision screening.

PART IV-E

Session 1.

- Review of the hearing organ.

Session 2.

- Discussion of importance of hearing screening and early identification of hearing problems.
- Discussions of possible symptoms of hearing problems.

Session 3.

- Methods of hearing screening.
- Procedures.

Session 4.

- Practice with staff in hearing tests.

PART IV-F

Session 1.

- Physical assessment; discussion.
- Discussion of who will do the physical assessment in your programs. Who else could do it? Why? Advantages and disadvantages.

Session 2.

- Observation of physical assessment of children of various ages.

 (A field trip may be necessary.)
- Discussion and understanding of the absence of physical assessment.

Session 3,

- Importance of growth assessment.
- Practice in measurement-taking and recording, if possible on infants as well as older children.

Session 4.

- Dental assessment and its importance.
- Investigation of potential resources for referral.

PART IV-G

Session 1.

- Tuberculosis and its causes.
- Screening procedures.
- Criteria for test interpretation.

PART IV-H

Session 1.

- Sickle Cell: screening tests and their importance.
- Counseling and related problems.

PART IV-I

Session 1.

- Bacteriuria and its causes.
- Methods of screening.

PART IV-J

Session 1.

- Lead poisoning: sources, symptoms.

- Pica.
- Community resources.

PART IV-K

Session 1.

- Nutrition.
- Social, cultural and economic factors.
- Discussion of nutritional patterns in your community.

Session 2.

 Field trip to food stores, school lunch and supplemental food programs in the community.

Session 3.

 Field trip discussion and evaluation; practice using food-intake questionmaires on staff members.

Session 4.

- Anemia.

PART V

Session 1.

- Case management: referral and follow-up; various methods.

Session 2.

- Intervention and referral; various community resources.

PART VI

Session 1.

- Evaluation of training sessions.
- Staff evaluation of each other's understanding of the subject matter, expanded awareness of community conditions, and sensitiwity to individual and family problems.



